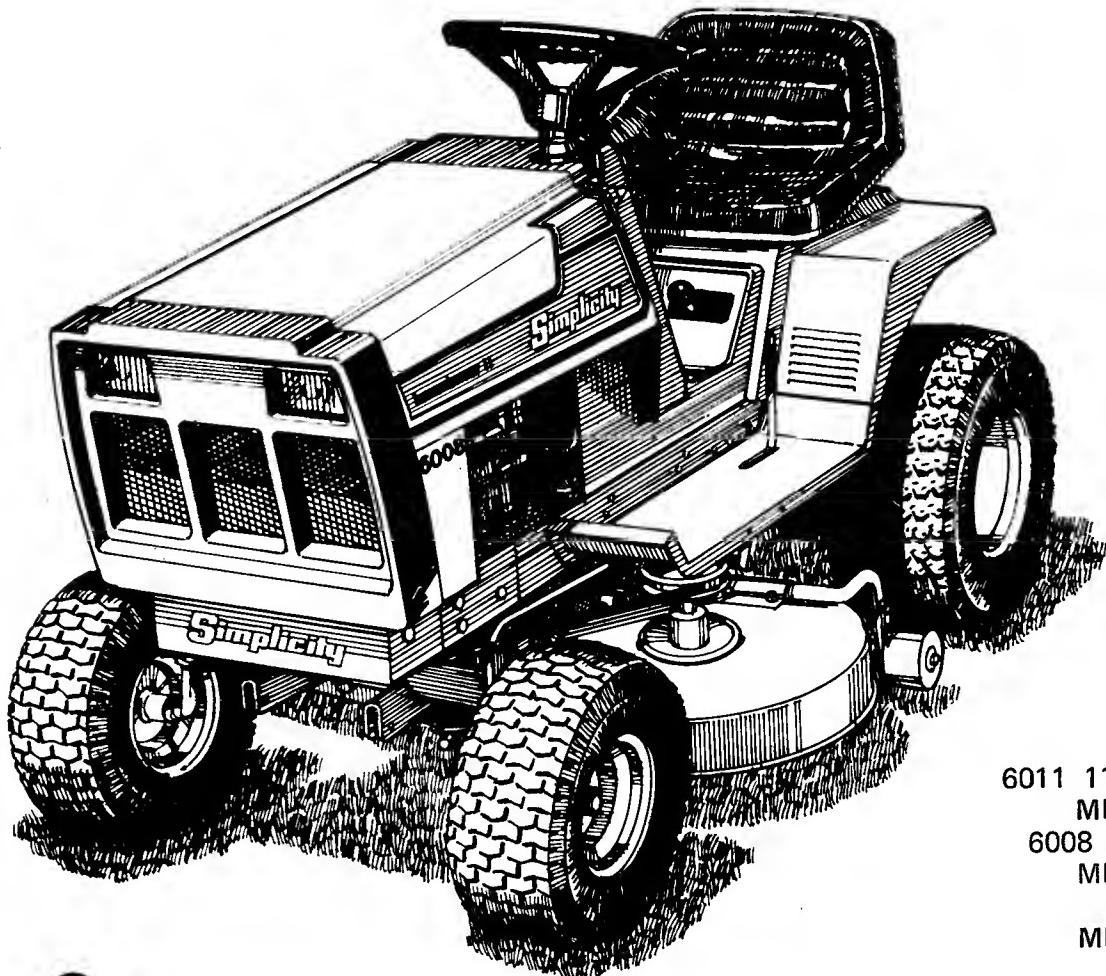


Simplicity
AN ALLIS-CHALMERS COMPANY

OPERATOR'S MANUAL

MODELS 6008 and 6011



6011 11 H.P. TRACTOR
MFG. NO. 1690347
6008 8 H.P. TRACTOR
MFG. NO. 1690193
36" MOWER
MFG. NO. 1690274
42" MOWER
MFG. NO. 1690273



**CAUTION: READ MANUAL THOROUGHLY
BEFORE OPERATING TRACTOR**

FORM - 1663311-02
PRINTED IN U.S.A.
789

Dear Customer,

Congratulations on your purchase of this tractor and mower. They have been carefully designed and constructed to provide you with years of dependable service. This tractor and mower have been built to meet or exceed current Outdoor Power Equipment Institute (OPEI) safety standards, according to American National Safety Institute (ANSI) Safety Specification B71.1b - 1977, and have been certified by an independent testing laboratory. With proper use and care, this tractor and mower will help you do all your jobs efficiently.

To ensure yourself of the utmost value and performance from your purchase, read this manual carefully. Make sure that your tractor and mower are adjusted properly and operated correctly. Be sure that you (and anyone who operates this machine) know how to use the machine safely. Be thoroughly familiar with all controls and procedures before actual operation.

Also, carefully read and follow the safety rules in this manual and those in your attachment manuals. Review this safety information often; it is there for your benefit and it is important.

This manual provides you with step-by-step installation, operation, normal care, troubleshooting, and adjustment procedures for your tractor and mower. If help is needed with any of these procedures however, your dealer will be happy to assist you.

Measurements are given in this manual with metric equivalents in parentheses. For example, behind the measurement 1/8 inch will appear: (3 mm). So, the metric equivalent of 1/8 inch is 3 millimetres.

These metric measurements are provided for your convenience as an aid in converting to the metric system. A list of metric terms and abbreviations is given below.

LIST OF ABBREVIATIONS OF METRIC TERMS

m	=	metres
mm	=	millimetres
L	=	litres
km/h	=	kilometres per hour
kPa	=	kiloPascals
ml	=	millilitres
kW	=	kilowatts
cc	=	cubic centimetres
kg	=	kilograms
°C	=	degrees Celsius
N·m	=	newton-metres

6000 Series

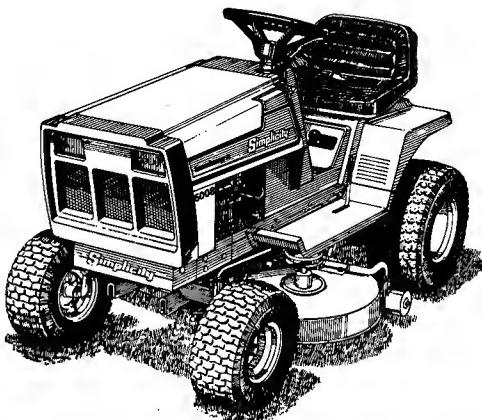


Table of Contents

SAFETY RULES	2
OWNER BENEFITS	5
MOWER INSTALLATION	6
CONTENT OF SECTION	6
REMOVING MOWER	8
OPERATION	9
CONTENT OF SECTION	9
TRACTOR CONTROLS	9
OPERATING PROCEDURES	10
MAINTENANCE RECORD	14
NORMAL CARE	15
CONTENT OF SECTION	15
TRACTOR SCHEDULED CARE	15
TRACTOR STORAGE	15
MOWER SCHEDULED CARE	24
TROUBLESHOOTING	27
CONTENT OF SECTION	27
TRACTOR TROUBLESHOOTING	27
MOWER TROUBLESHOOTING	28
BELT REPLACEMENT	30
ADJUSTMENTS	33
CONTENT OF SECTION	33
TRACTOR ADJUSTMENT PROCEDURES	33
MOWER ADJUSTMENT PROCEDURES	34
ELECTRICAL SCHEMATIC	38
TRACTOR AND MOWER SETUP	39
SPECIFICATIONS	43
ATTACHMENT OPERATION CHART	45
TRACTOR IDENTIFICATION	46
ATTACHMENTS AND ACCESSORIES	46



WARNING

Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself or bystanders, or damage to property or equipment affecting safety.

Safety Rules



This notation preceding Cautions and Warnings in the text signifies important precautionary steps which, if not properly followed, could result in personal injury or damage to your equipment affecting safety.

General

- Read the Operator's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Never allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- Do not carry passengers.
- Use only attachments or accessories designed for your machine. See your dealer for a complete list of recommended attachments or accessories.

- Keep the area of operation clear of all persons, particularly small children, and pets.
- Never direct discharge of material toward bystanders or allow anyone near the vehicle while in operation.
- Make sure:
 - a. tractor and attachments are in good operating condition,
 - b. all safety devices and shields are in place and in good working condition, and
 - c. all adjustments have been made.

Preparation

- Handle gasoline with care - it is highly flammable.
 - a. Use approved gasoline container.
 - b. Never remove the cap of the fuel tank or add gasoline to a running or hot engine, or fill the fuel tank indoors. Wipe up spilled gasoline.
- Do not run the engine indoors. Exhaust fumes are deadly.

- Clear the work area of objects which might be picked up and thrown by attachments.
- Disengage all attachment clutches and shift into neutral before attempting to start the engine.
- Wear heavy footwear. Do not operate tractor when barefoot or when wearing open sandals or canvas shoes.

Operation

- Disengage power to attachment(s), stop tractor engine, shift into neutral, set parking brake, and remove the key before leaving the operator's position for any reason, such as to unclog attachment chutes or to make repairs or adjustments.

- Stop tractor and attachments and inspect for damage after striking a foreign object. Repair any damage before restarting and operating the equipment.
- Watch out for traffic when crossing or near roadways.

- When using the tractor with attachments, proceed as follows.
 - a. Operate only in daylight or in good artificial light.
 - b. Never make any adjustment while the engine is running.
 - c. Check all hardware, especially mower blade mounting bolts, for tightness at frequent intervals.
- Operate only up and down the face of slopes; never across the face. Do not stop or start suddenly on slopes.
- Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Use extreme caution when changing direction on slopes.
- Be especially careful not to touch tractor or attachment parts which might be hot from operation. Allow such parts to cool before attempting to maintain, adjust, or service.
- Stay alert for holes in the terrain and other hidden hazards. Be extra careful when operating on wet or slippery surfaces.

Maintenance and Storage

- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Do not change the engine governor settings or overspeed the engine.

- If equipment begins to vibrate abnormally, disengage power to attachments and stop engine at once. Inspect for damage and correct before starting up tractor.
- Use care when pulling loads or using heavy equipment.
 - a. Use only drawbar hitch point.
 - b. Limit loads to those you can safely control.
 - c. Do not turn sharply. Use care when backing.
 - d. Use weights when recommended in the tractor or attachment Operator's Manual.
- Disengage power to attachment(s) when transporting or not in use.
- Take all possible precautions when leaving the vehicle unattended, such as disengaging the power take-off, lowering the attachments(s), shifting into neutral, setting the parking brake, stopping the engine, and removing the key.

-
- To reduce fire hazard, keep the engine free of grass, leaves, and excess grease.
 - Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
-

ALL WARNING, CAUTION, and instructional messages on your tractor and mower should be carefully read and obeyed. Personal bodily injury can result when these instructions are not followed. The information is for your safety and it is important. The safety messages following on the next page are on your tractor and mower.

**DANGER**

1. Stand clear of discharge opening.
2. Do not operate mower without deflector or grass collector in place.

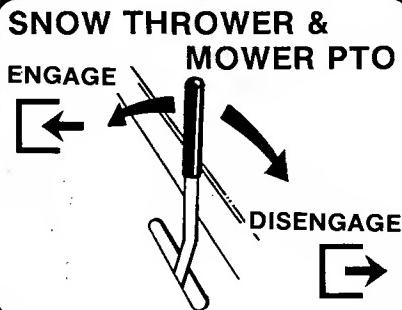
LOCATION: At mower discharge opening

**DANGER**
keep hands & feet
from under mower

LOCATION: On left-hand side of mower deck.

**Keep Cover
In Place****CAUTION**
Hot Surfaces

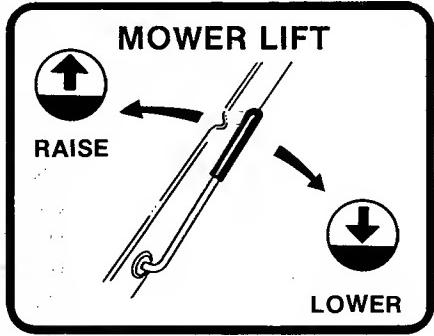
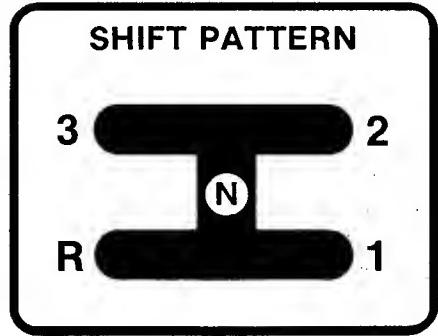
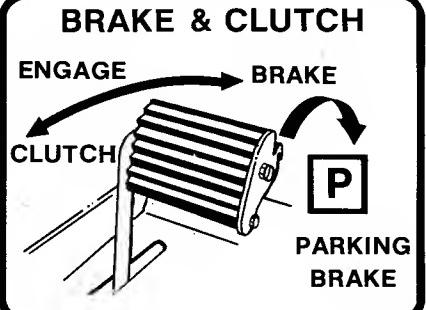
LOCATION: On 42" mower hitch only.

**CAUTION**

1. Keep all shields in place.
2. Keep hands, feet, and clothing away from power driven parts.
3. Keep people and pets a safe distance away from machine.
4. For your safety, to start tractor transmission shift lever must be in neutral and PTO disengaged.
5. Before operating read safety instructions in operator's manual.

Before leaving operator's position:

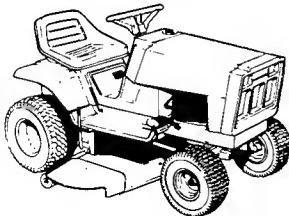
1. Shift transmission to neutral.
2. Disengage PTO.
3. Set parking brake.
4. Shut off engine and remove key.
5. Wait for all movement to stop before servicing.



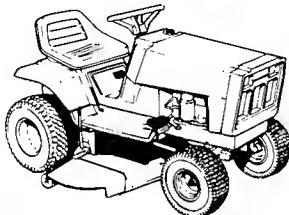
LOCATION: On tractor top frame at shift lever

Models illustrated in this manual may vary slightly from the model you have.

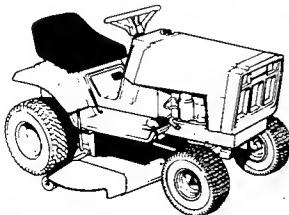
Owner Benefits



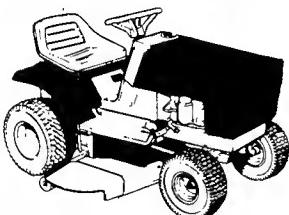
Dependable, rugged engines — The 6008 has an 8 horsepower synchro-balanced engine, and the 6011 has an 11 horsepower synchro-balanced engine. Both engines have mechanical governors for smooth engine performance under varying load conditions.



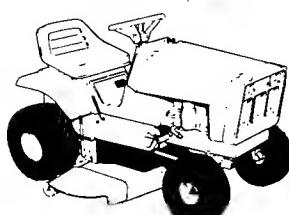
Combined clutch and brake pedal helps ensure safe starting and stopping with easy rocker action. Parking brake is engaged by pressing and tilting pedal.



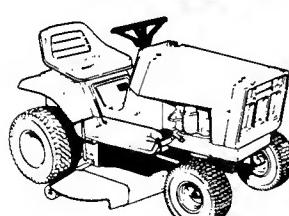
Comfortable padded bucket seat is vinyl covered and adjustable to suit different size operators.



Tilt-up hood and seat deck make maintenance areas accessible.



Large wide tires give comfortable ride and help protect your lawn.



Steering is easy with all-gear system designed for quick maneuverability and long life. The short turning radius allows working around tight corners and in confined areas.

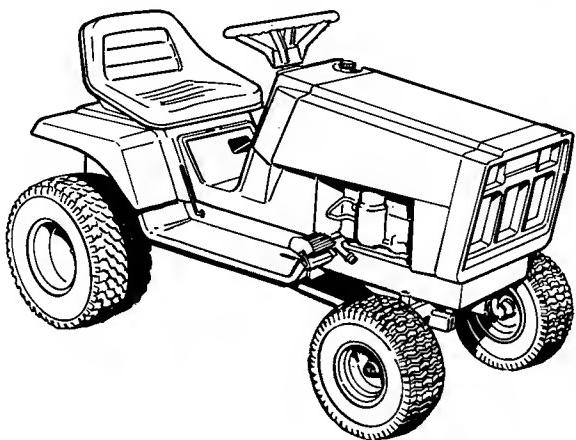
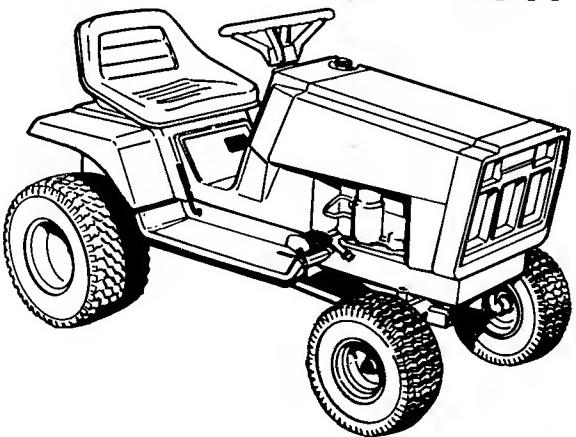
Safety interlock lights tell operator if PTO is not disengaged or gear shift is not in neutral for starting.

Full length footrests increase operator comfort and safety.

Wide rollers help the mower follow the contour of your lawn to give smooth, neat mowing.

Tool box lets you carry tools with you on the tractor, safely and without fear or loss of damage.

Free-floating mower design allows mower to pivot with front axle to follow ground contours and help give smooth, even cut.

6008**6011**

Quick mounting attachments designed to fit on your tractor without modification.

Dependable all-gear transaxle has three forward speeds, one reverse. Gears are fully enclosed, sealed and lubricated.

Fast starting under all weather conditions is easier with a heavy duty 12 volt electric starter and battery.

Dash-mounted operating controls are easily accessible and provide finger-tip control.

Mower Installation

CONTENT OF SECTION

This section provides installation and removal instructions for your mower. Instructions are given first for installing the 36 inch (914 mm) mower, and then for installing the 42 inch (1067 mm) mower. Mower removal instructions are last. Before installing the mower, check main drive belt stop adjustment and clutch-brake adjustments in Adjustment section.



WARNING

For your personal safety, stop engine, set parking brake, and remove key to prevent accidental starting. Never attempt to install or remove your mower when engine is running.

If tractor and mower have not been set up, see Tractor and Mower Setup section.

INSTALLING THE 36 INCH MOWER

1. Place your tractor and mower on a smooth hard surface, such as concrete, with the mower on the right side of the tractor.
2. Turn the front wheels of the tractor as far as they go to the left. Place mower in lowest cutting position.
3. Slide the mower under the tractor (see figure 1).
4. Slip the lift link into the lift lever arm and attach the lift chain to the lift link (figure 2).
5. Attach the mower hitch to the rear holes in the front axle mounting points (figure 3) using the two pins and safety clips provided.

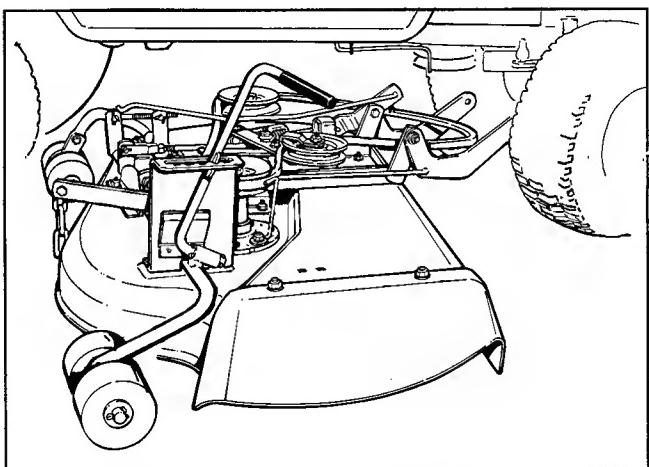


Figure 1. Installing 36" Mower

6. Slip the mower drive belt on the engine PTO pulley (figure 3).
7. Install the PTO rod in the mower PTO arm and in the tractor PTO lever using the spring

clips provided (use front hole in PTO lever, as shown in figure 4).

8. Adjust mower drive belt and belt stops as necessary according to the Adjustments section of this manual.

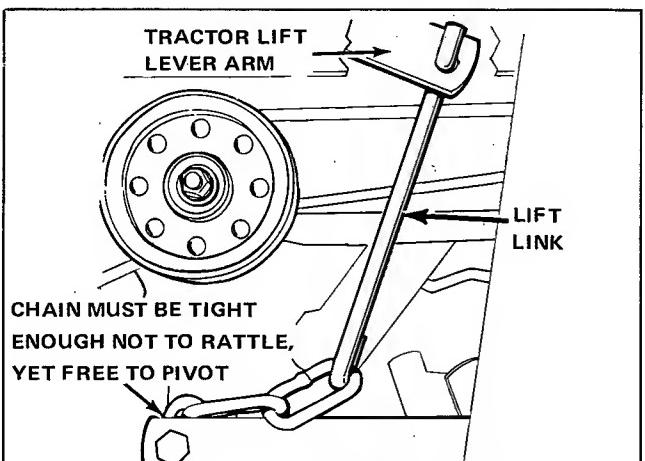


Figure 2. Installing Lift Link

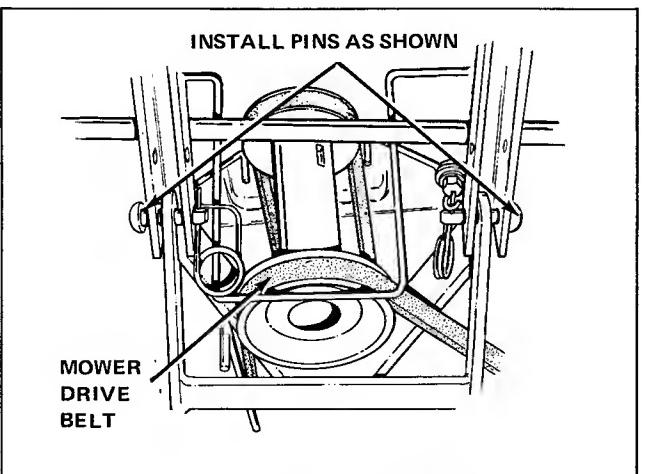


Figure 3. Attaching Mower

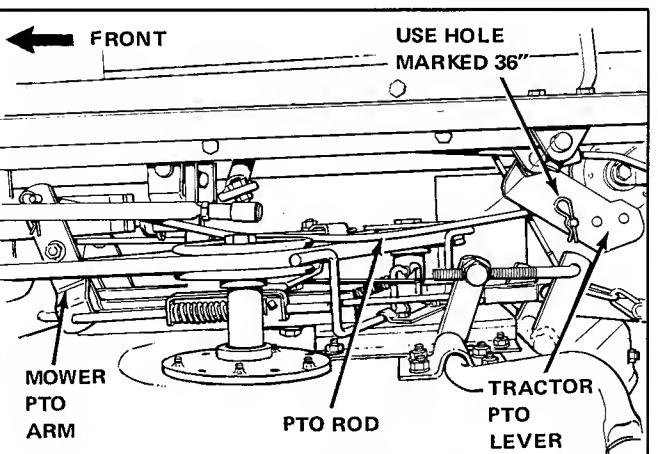


Figure 4. Installing PTO Rod

INSTALLING THE 42 INCH MOWER

To install the 42 inch mower on your tractor, perform the following steps:

1. Place tractor and mower on a smooth hard surface, such as concrete, with the mower on the right side of the tractor.
2. Turn the front wheels of the tractor as far to the left as they go. Place mower in lowest cutting position.
3. Slide the front of the mower hitch between the front wheels, then slide the left side of the mower housing underneath the tractor (see figure 5).

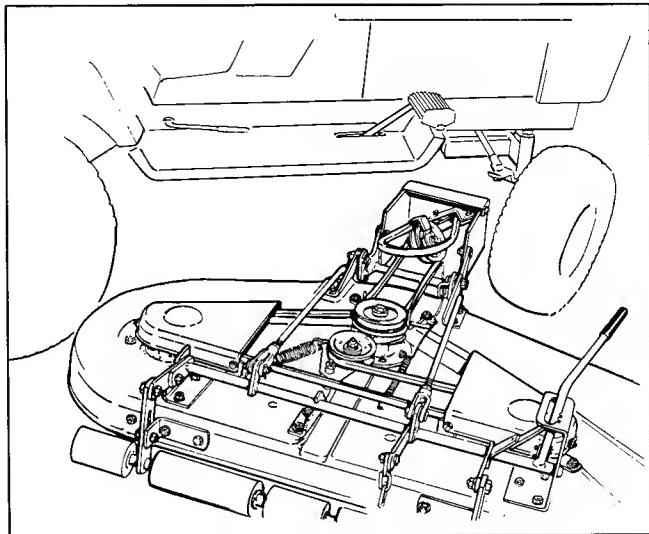


Figure 5. Installing 42" Mower

4. Slip the lift link into the lift lever arm and attach the lift chain to the lift link (see figure 6).



WARNING

For your personal safety, use care when working near the engine muffler. If it is hot from recent operation it can cause serious burns.

5. Install two pins and spring clips through the front holes in the front axle mounting points (see figure 7).
6. Grasp the bottom of the mower hitch to lift and hook it over the two pins just installed in the front axle mounting points (see figure 7).

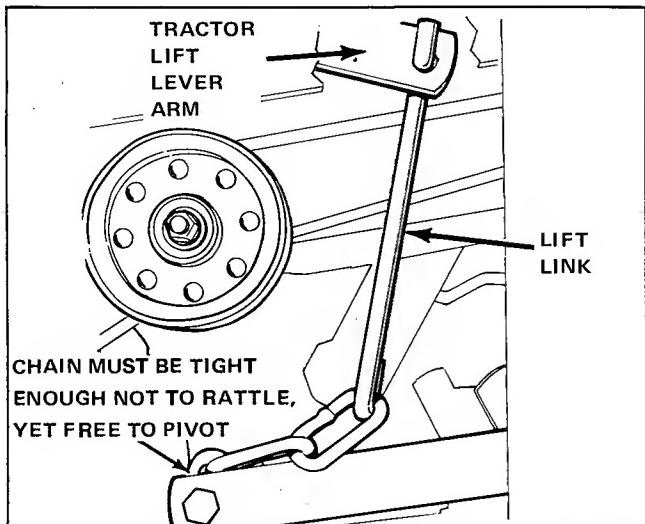


Figure 6. Installing Lift Link

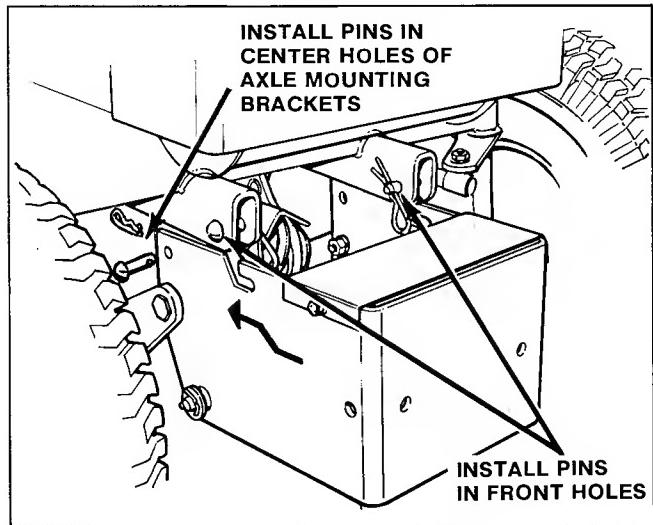


Figure 7. Attaching 42" Mower

7. Press down on the front of the mower hitch and rotate the rear of the hitch upward so that the holes in the hitch line up with the center holes in the front axle mounting points. Install two pins and spring clips through the center holes (see figure 7).
8. Slip the mower drive belt on the engine PTO pulley.
9. Attach the front of the mower PTO rod to the mower pivot arm with a spring clip (see figure 8).
10. Attach the PTO rod guide to the PTO lever arm with a spring clip, using the center hole of the arm, as shown in figure 9. The setscrew on the PTO rod (Figure 53) should be facing straight up.

11. Adjust the mower drive belt tension and belt stops as necessary according to the Adjustments section of this manual.

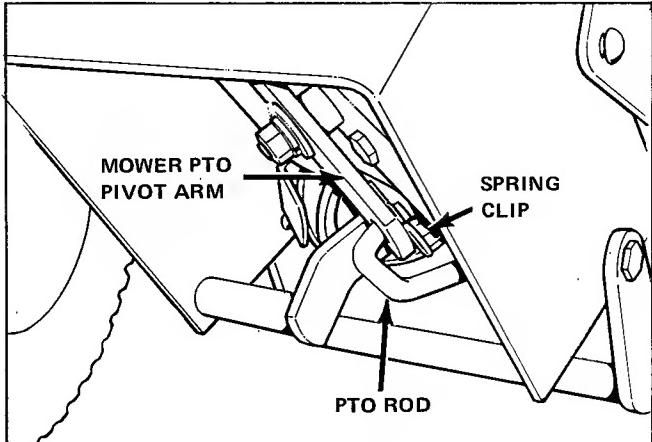


Figure 8. Attaching PTO Rod

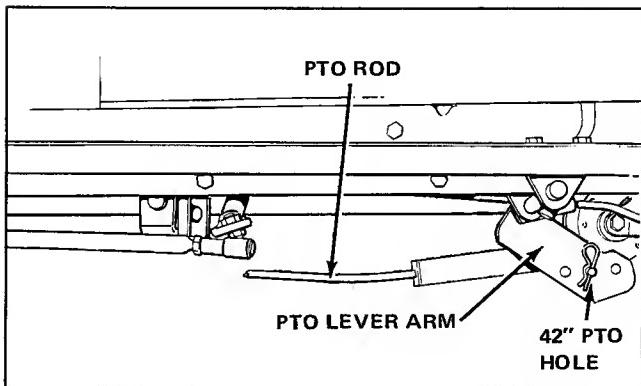


Figure 9. Attaching PTO Rod

REMOVING MOWER FROM TRACTOR

To remove the mower from your tractor, perform the following steps.



WARNING

For your personal safety, take special care when working near the engine muffler on 11 h.p. tractors. If it is hot from recent operation it can cause serious burns.

Also make sure the 42" mower hitch is not too hot to touch. Allow the hitch and muffler to cool before removing the 42" mower.

1. With the PTO disengaged, remove the mower drive belt from the engine PTO pulley.
2. Remove the PTO rod from the tractor PTO lever. Reinstall the spring clip in the PTO rod for storage.

For easier mower removal, the 42 inch mower PTO rod should be removed from the mower completely. To remove the PTO rod, pull out the spring clip holding the PTO rod to the mower PTO arm and remove rod.

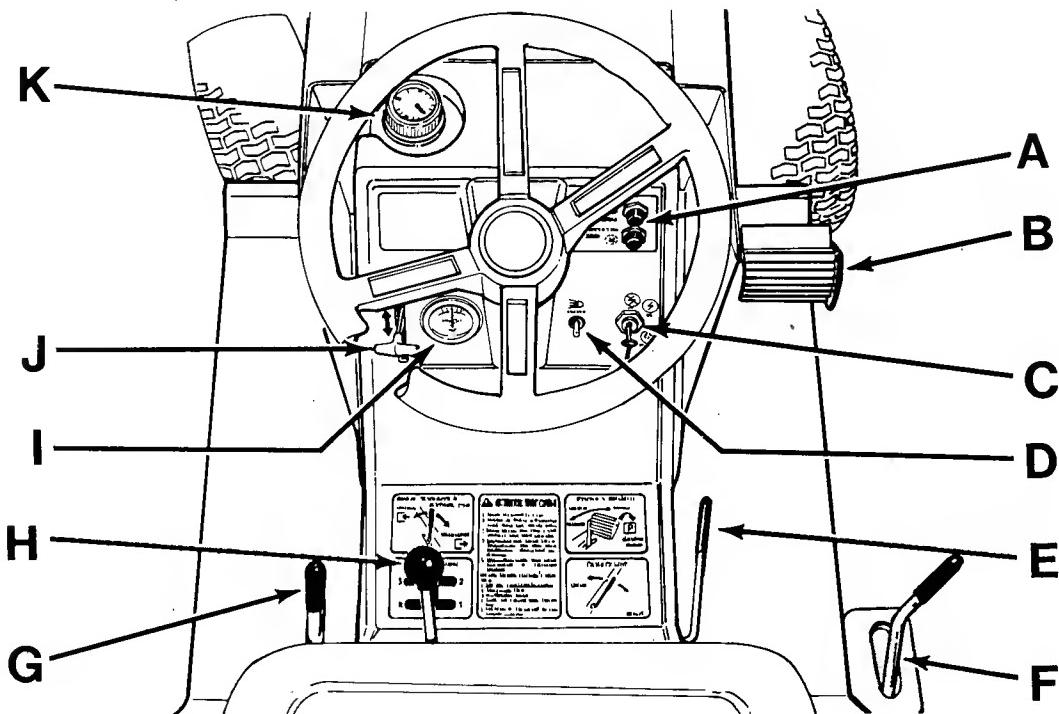
3. Place the mower in the lowest cutting position and lower the mower lift lever.
4. Unhook the lift chain from the lift link and remove the lift link from the tractor lift arm.
5. Remove the pins attaching the mower to the tractor. Replace the pins and spring clips in the mower hitch for storage.
6. Turn the tractor wheels as far as they go to the left.
7. Slide the mower out from under the tractor from the right side.

Operation

CONTENT OF SECTION

A brief description of tractor controls, followed by the basic tractor operating procedures, is given in this section to help you get to know your tractor and how to operate it safely and efficiently.

Figure 10 shows the location, name, and function of each of the tractor controls. The control names given in figure 10 are used throughout the manual.



Item	Name	Function
A	Safety Inter-lock Lights	Show when PTO and transaxle are in disengaged (neutral) position.
B	Clutch-Brake Pedal	Controls both main clutch and brake. Disengages clutch when pressed down at least half-way. Applies brake when fully depressed. Locks brake to hold tractor in parked position.
C	Ignition Switch	Operates with key to start, run, or stop engine.
D	Light Switch	Switches tractor headlights on or off.
E	Lift Lever	Lifts and locks the rotary mower in transport position.
F	Mower Height Control	Adjusts mower cutting height.

Item	Name	Function
G	PTO (Power Take-Off) Clutch Lever	Operates clutch for power driven attachments. Used to engage and disengage attachments.
H	Gear Shift Lever	Shifts transmission gears to control ground speed and direction of travel.
I	Ammeter	Shows when battery is being charged or discharged.
J	Engine Speed Control	Operates engine choke and throttle. Positioned at CHOKE to start cold engine. Positions from SLOW to FAST used to adjust engine speed.
K	Fuel Gauge Cap	Shows the amount of fuel in the tank and serves as fuel tank cap.

Figure 10. Locations and Functions of Controls

OPERATING PROCEDURES

The remainder of this section contains tractor operating procedures. The procedures assume that the tractor is working properly. If it isn't, refer to the Troubleshooting section of this manual.

The procedures in this section are arranged in the normal sequence of operations from "Checks before Starting" through "Operating with Attachments." The arrangement is intended primarily to acquaint you as the operator with the fundamental operating procedures to ensure safe, efficient operation of your tractor. It is recommended that when operating the tractor for the first time you make the following checks in sequence:

- Locations and Functions of Controls
- Checks Before Starting
- Stopping the Tractor
- Selecting and Shifting Gears
- Starting the Engine
- Starting Tractor into Motion
- Before Leaving the Tractor

Also, when driving the tractor for the first time, start off slowly and drive only on level ground. Get the feel of starting, stopping, and starting again. Then increase speed by shifting gears or moving the engine speed control.

After you have become familiar with all of the procedures for the tractor you should be ready to operate the attachments. Refer to the instructions in this section titled "Operating with Attachments," the attachment operation chart (figure 47), and the appropriate Operator's Manual for the attachment.

Checks Before Starting

Read this manual completely before the first use of your tractor, and thereafter as often as necessary to ensure safe and efficient tractor operation.

The following checks should be performed before starting the engine for the first time. Repeat these checks each time you use the tractor to ensure that it is ready to use.

1. Refer to Normal Care Section of this manual to determine and perform needed care. Be sure to check the engine crankcase oil level.

2. Check all nuts, bolts, screws, and pins to be sure they are in place and tight.
3. Seat yourself on the tractor. Try operating some of the controls to see if the seat position fits you. If not, see the seat adjustment procedure in the Adjustments Section of this manual.
4. Check the fuel gauge. If you need more fuel to complete the job at hand, fill the tank as follows:



WARNING

Gasoline is highly flammable and must be handled with care. Never fill the tank when the engine is hot. Do not allow open flame, smoking, or matches in the area. Avoid overfilling and wipe up any spills.

- a. Remove fuel gauge cap as shown in figure 11.
- b. Fill fuel tank with clean, fresh, leaded or lead-free regular grade gasoline.
- c. Install and hand tighten fuel gauge cap.

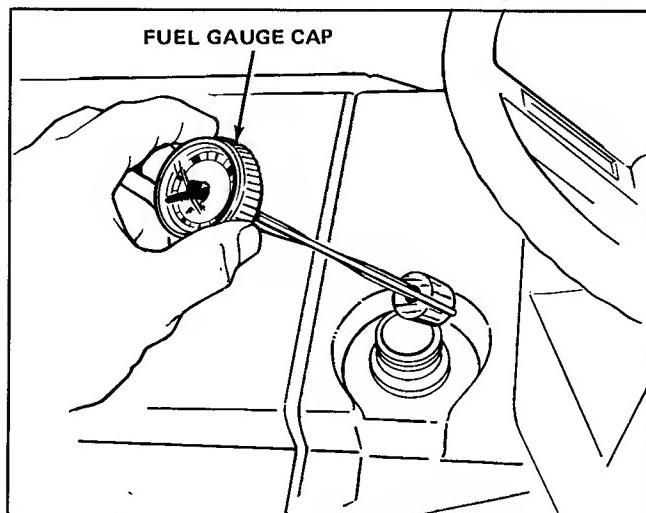


Figure 11. Removing Fuel Cap

Stopping the Tractor

The clutch-brake pedal is used to produce either gradual or rapid stops. For a gradual stop on level ground, press the pedal down only far enough to disengage the clutch. For a more rapid stop, press the pedal down further to also apply the brake.

Try to avoid sudden stops on hills. Also avoid using the brake to control downhill speed. Select a low gear and a slow engine speed before starting downhill.

Selecting and Shifting Gears

The transmission gears are shifted by moving the gear shift lever. The gear shift lever has five positions: neutral, reverse, and the three forward speeds. A decal on the tractor below the shift lever shows the shift pattern. Shift gears as follows:

1. Determine the gear best suited for the desired tractor speed. Use guides below:

NOTE

When using an attachment, consult the attachment manual for proper gear and speed and the Attachment Operation Chart at the end of this manual.

- Neutral gear position disengages engine from rear drive wheels. Select neutral to enable engine starting.
 - Reverse gear drives the tractor backwards. Select this gear to back up.
 - First gear produces slow tractor speeds in the forward direction. The fastest possible speed in this gear is just under 1 mile per hour (1.5 km/h). Use this gear to travel up or down hills or over rough ground.
 - Second gear produces medium tractor speeds of over 2 miles per hour (3.7 km/h) in the forward direction. Use this gear for travel on slight slopes or where ground is fairly smooth.
 - Third gear produces a maximum tractor speed of under 4 miles per hour (5.8 km/h) in a forward direction. Use this gear to travel longer distances over ground or pavement that is smooth and level.
2. Press down on clutch-brake pedal to disengage clutch.
 3. Bring tractor to a complete stop (if moving).
 4. Move the gear shift lever in the position for the desired gear. You are now ready to start or resume tractor motion.

Starting the Engine

After completing the "Checks Before Starting," proceed as follows:



WARNING

For your personal safety, do not start or run engine in an enclosed area. Exhaust fumes are deadly.

1. Seat yourself in the operator's position.
2. Set parking brake by depressing pedal and latching pedal clip over footrest edge.
3. Set the engine speed control to CHOKE position. When engine is warm, it may not be necessary to choke engine.

NOTE

As a safety feature, the gear shift lever must be in neutral and the mower PTO fully disengaged before the engine will start. The safety interlock lights will go on during starting if shift lever is in neutral and PTO is disengaged.

4. Lift PTO lever as far as it will go to the rear to disengage attachment.
5. Set gear shift lever in neutral position.
6. Insert the key into the ignition switch and turn it clockwise to START. The engine should start. If not, use the safety interlock lights to determine whether gear shift lever is in neutral and PTO is disengaged.
7. When the engine starts, release the key. It will return to the ON position for normal running.
8. Move the engine speed control to SLOW. Warm up the engine by running it for at least a minute before engaging the mower clutch lever or driving the tractor.

Starting the Tractor into Motion

This procedure describes how to safely start the tractor into motion after starting the engine and selecting a gear.

1. Position the front wheels straight ahead. Whenever possible, the first motion should be straight forward or backward.



CAUTION

For your safety, be aware that reverse gear produces a fairly rapid speed when backing your tractor. Use caution and reduce engine speed if necessary.

2. Set engine control for 1/3 to 1/2 speed.

3. Release parking brake by pressing down on the clutch-brake pedal.
4. Make sure that the path in desired direction of movement is clear.
5. Slowly release clutch-brake pedal to engage clutch and set tractor into motion.
6. Adjust engine speed control for desired speed.

Operation on Slopes

For your personal safety, always operate your tractor up and down the face of slopes, and never across the face. Never attempt to operate on steep slopes. Be sure to use slow tractor ground speeds on slopes, and use extreme caution when changing direction on any slope. Do not start or stop suddenly on slopes.

Also, use tractor wheel weights where required or recommended for added stability and handling on slopes. See the "Operating with Attachments" chart (figure 47) at the end of this manual and your attachment Operator's Manual for wheel weight and slope information when operating with attachments.

Use two rear wheel weights when operating your tractor on slopes over 15 percent (8.5°). Never operate on slopes greater than 30 percent (16.7°), which is a 3 feet rise in 10 feet forward, and always operate in an up and down direction.

Operating with Attachments

These instructions describe a general procedure for tractor operation with attachments.

1. Be sure the attachment is properly installed and ready for use. Refer to attachment Operator's Manual.
2. Start tractor engine.
3. Raise the attachment.
4. Select and shift into gear best suited to travel to work site.
5. Start tractor into motion and proceed to work site.
6. At work site, bring tractor to complete stop.
7. Shift into neutral gear position.
8. Lower the attachment, shut off engine and remove key.
9. Clear work site of any objects that might be thrown by or get caught in attachment, such as sticks, stones, bones, wire, etc.

10. Start tractor and then engage attachment slowly.
11. Adjust engine speed control (usually about 3/4 speed) and shift to gear best suited to attachment operation. (Refer to attachment manual or to the Operating with Attachments chart at the end of this manual.)
12. Start tractor into motion.

NOTE

Complete remaining steps to return machine to storage site.

13. Disengage attachment, stop tractor motion, and shift into neutral.
14. Raise attachment to its highest position.
15. Shift into desired gear and resume tractor motion to return to storage site.

Before Leaving Tractor

For your safety and that of others, perform steps below before leaving tractor seat.

1. Disengage attachment, stop tractor motion, and shift into neutral.
2. Set engine control to SLOW.

NOTE

Stopping a hot engine too suddenly can cause engine damage. Move engine control to SLOW and idle engine for about one minute before stopping engine.

3. Set parking brake by pressing clutch-brake pedal down fully and latching pedal clip over footrest edge.
4. Lower the attachment
5. Turn ignition key to OFF and remove key.

Operating with Mower



WARNING

To prevent serious personal injury, do not work around the mower housing area until you are certain that the mower blades have stopped rotating. Obey the Warnings on the mower housing and the Safety Rules at the front of this manual.

When operating the mower for the first time, begin by operating on a level surface at a slow ground speed until you become familiar with the controls and handling of the tractor.

Before starting your mowing job, check the mower carefully to be sure it is properly installed and the mower blades are in good condition.

Determine the best method of mowing according to the shape, terrain, and obstructions of the lawn.

Be sure that the mower is properly leveled and adjusted as outlined in the Adjustments Section of this manual.

Engine Speed. Engine speed should normally be operated at 2/3 to full throttle when mowing. When grass is wet or over 3 inches (76 mm) high, engine should be run at full speed for best results.

Transmission Gear Selection. Second gear should only be used in smooth level lawns with moderate to light grass crop. Always select a forward speed that is slow enough to assure that you can properly and safely control the tractor over the ground conditions encountered. On rough or hilly terrain, or when the grass crop is heavy, use first gear.

Mowing Pattern and Tips. For the first use of the mower choose a smooth level area. Cut long straight strips overlapping slightly.

The size and type of area to be mowed determine the best mowing pattern to use. Obstructions such as trees, fences, and buildings must also be considered. In most cases, making one or two passes in a clockwise direction around the outside of the area

to be mowed is advisable to keep cut grass off fences and walks. The remainder of the mowing should be done in a counterclockwise direction so the clippings are dispersed on the cut area.

Always keep the left side of the mower toward trees, posts, or other obstacles on the first pass around the obstacles to keep hand trimming to a minimum.

On moderate size, frequently mowed lawns where grass is light and dry, it is sometimes practical to mow in a clockwise direction so that clippings are thrown toward the center of the lawn and concentrated for pickup and removal.

Most lawns should be mowed to keep the grass approximately two to three inches (50 to 75 mm) high. Best results are obtained by cutting often and not too short. To help keep a green lawn, never mow more than one third off the height of the grass, or a maximum of one inch (25 mm), in one mowing. For extremely tall grass, set the cutting height at maximum for the first pass, and then reset to the desired height and mow again. Allow the grass to grow to three inches, then cut off only the top inch.

On thick, or springy grass or soft ground, the mower rollers may sink into the ground giving too low a cut. Adjust the cutting height as necessary.

For best appearance, grass should be cut in the afternoon or early evening (in daylight) when it is free of external moisture.

Where possible, change patterns occasionally to eliminate matting, graining or a corrugated appearance.

Simplicity

Maintenance Record

Figure 12. Maintenance Record

Normal Care

CONTENT OF SECTION

Your tractor and mower were designed and built to provide years of service with only minor care. Certain tasks, however, must be performed to keep them in good operating condition and to avoid costly repair. This section provides the necessary care instructions for your tractor and mower. To service any other attachment, refer to the separate manual for that attachment.

TRACTOR SCHEDULED CARE

A schedule for routine care is provided in figure 13. Check the items listed before operating the tractor for the first time to ensure that the tractor is ready for use. Performing the checks will also help you to become familiar with the care of the tractor.

All other scheduled care is performed before each use or after operating the tractor a specific amount of time. See figures 14 through 20. Remember to perform the "every 25-hour check" when you perform the "every 100-hour check." Also perform "every 5-hour check" when you perform "every 25-hour check".

Because the schedule is based on operating time, it is necessary to determine the actual operating time. This is easily accomplished if your tractor is equipped with an optional hourmeter. If not, you can estimate normal times for regular jobs such as cutting your lawn. Multiply these normal times by the number of times you perform the jobs to determine total operating time. A Maintenance Record (figure 12) is provided on the preceding page to help you keep a record of all operating hours and maintenance repair actions.

TRACTOR NORMAL STORAGE

To protect your tractor, store it in an enclosed dry area. Do not store it in an enclosure where fumes from the fuel tank could reach an open flame without first running the fuel tank dry.

To store your tractor in a cold area between winter snow removal jobs, we suggest that you fill the fuel tank at the completion of each job to prevent water condensation in the fuel tank.

If you do not intend to use your tractor during the winter months, follow these off-season storage instructions.

TRACTOR OFF-SEASON STORAGE

When the tractor is to be stored for two months or longer, take precautions as follows:



WARNING

For your personal safety, keep open flame or spark away from flammable gasoline when working near the fuel tank. Never store tractor where gasoline fumes may reach an open flame or spark.

1. To empty or prepare fuel tank:
 - a. Run tractor engine until it stops from lack of fuel, or
 - b. Use a gasoline stabilizer. This additive, available from your dealer, prevents formation of gum and varnish for up to one year. With the additive, fuel may remain in your tank for long periods.

Care Required	See Figure	Schedule				
		Before First Use	Every 5 Hours	Every 25 Hours	Every 100 Hours	Spring and Fall
Check Tractor and Engine	14	•	•			
Clean Engine and Air Filter	15			•		
Change Engine Oil *	16			•		•
Lubricate Tractor	17	•		•		
Check Fluid Levels and Tire Pressure	18	•		•		
Clean Battery and Cables	19				•	
Clean or Replace Spark Plug	20				•	

* Change original engine oil after first 5 hours of operation.
 ** More often in hot (over 70°F: 21°C) weather or dusty operating conditions.
 *** only if tractor is used in both summer (over 40° F: 4.5°C) and winter (under 40° F: 4.5°C).

Figure 13. Summary of Scheduled Care

2. Change engine oil while the engine is still warm. (See figure 16). Record the type and weight of oil put in crankcase.
3. Remove spark plug. Pour one ounce (30 ml) of SAE 30 oil into engine through spark plug hole. Crank engine a few times to distribute oil and then reinstall the spark plug.
4. Lubricate tractor. (See figure 17).

**WARNING**

Batteries contain a sulfuric acid solution which can cause serious personal injury or property damage. Use care to prevent an accidental spill of battery acid. Do not allow the battery fluid to contact eyes, skin, fabrics, or painted surfaces.

1. Check tractor and engine for loose nuts, screws, bolts, oil leaks, etc.

2. With the tractor level, check/add engine crankcase oil as follows:

- A. Remove oil fill plug.
- B. Add oil until full. Use same weight and grade of oil used at last change. If changing oil see figure 16 for proper grade and weight of oil recommended.
- C. Reinstall and tighten the fill plug.

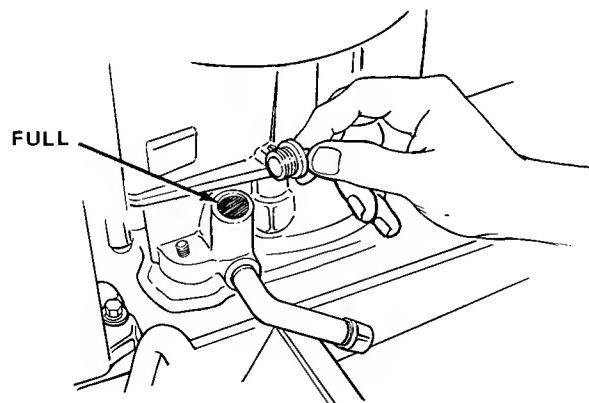
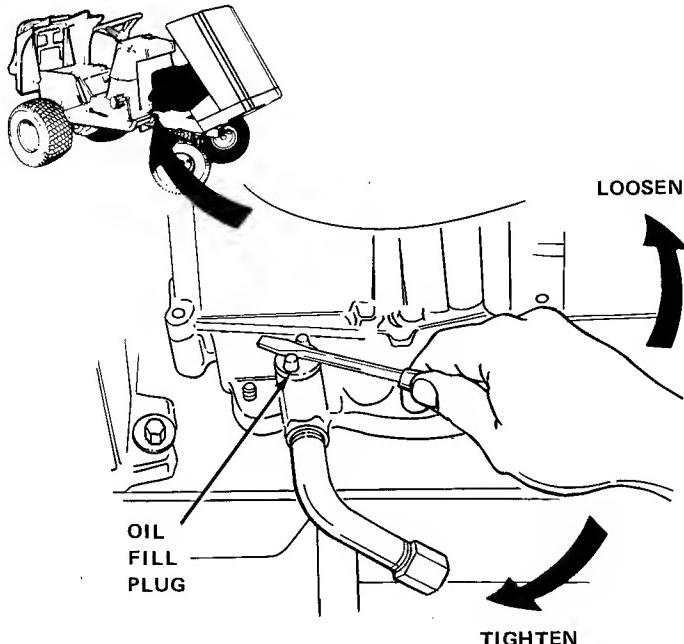


Figure 14. Check Tractor and Engine (5-Hour Care)

5. Check battery fluid level (figure 18). Battery life will be extended if it is removed and stored in a cool, dry place, fully charged.
6. Clean tractor thoroughly. Coat all exposed metal parts with a good quality paint (obtainable from your dealer) or a light film of grease or oil.
7. At end of storage period, follow instructions in "Starting After Storage."

STARTING AFTER STORAGE

Before starting the tractor after a period of off-season storage, perform the following:

1. Replace battery, if removed. Be sure terminals and clamps are clean (see figure 19).
2. Remove spark plug and wipe dry. Crank engine a few times to blow excess oil out of plug hole. Then reinstall the plug.
3. Fill fuel tank with fresh gasoline (unless a fuel stabilizer was used).
4. Clean engine fins and air filter. (See figure 15).
5. Check fluid levels and tire pressure. (See figure 18).
6. Start the engine outdoors. Do not run engine at high speeds immediately after starting.

Hot Weather Operation

When operating the tractor at temperatures above 70°F (21°C) pay particular attention to the following items to prevent damage.

1. Keep the engine cooling fins and fan screen clean and free of obstructions which would decrease air flow through the engine. See figure 15 for cleaning instructions.

2. Be sure that you are using the proper grade and weight of oil in the engine for the temperature at which the tractor is being used. Check the oil level each time you fill the fuel tank. DO NOT OVERFILL THE CRANK-CASE — ENGINE OVERHEATING MAY RESULT.
3. Check the battery water level more frequently than every 25 hours which is recommended under normal conditions. High temperatures cause faster water evaporation from the battery.

Cold Weather Operation

When the tractor is being used in temperatures below 30°F (-1°C), check the following items closely.

1. Use the correct grade and weight of oil for the temperature conditions. Change the oil only when the engine is warm. If an unexpected temperature drop occurs when the engine is filled with summer oil, before starting the engine, move the tractor to a warm location until the oil will flow freely.
2. Use fresh fuel. Fill the fuel tank after each day's use to protect against moisture condensation.
3. Disengage the clutch when starting the engine.

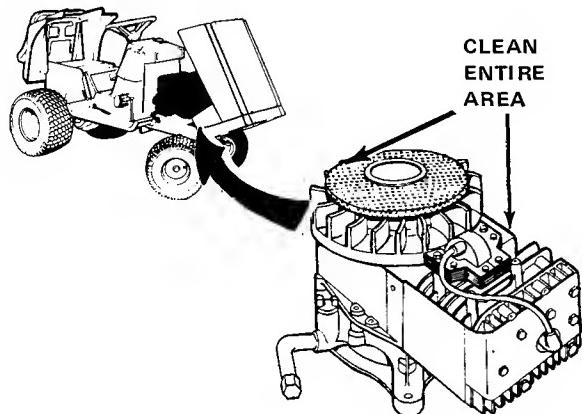
Dusty Operating Conditions

When the tractor is operated in dusty or dirty conditions check the following items closely.

1. Keep the engine fins and cooling fan screen clean and free of materials which will decrease air flow.
2. Service the air cleaner more frequently. Clean it as often as necessary to allow air to flow to the carburetor freely.
3. Change the engine oil more frequently. The oil should be changed more often than every 25 hours as is recommended under normal conditions. Change oil every 10 operating hours.

NOTE

Cleaning is important to avoid overheating and engine damage. More frequent cleaning is recommended after operating in dusty or muddy conditions or when cutting dry grass.



1. Clean grille screen in hood as needed.
2. Clean all dirt and grass from engine fins. Remove engine cover as necessary.
3. To clean the engine air filter:
 - A. Remove the two screws.
 - B. Lift air filter from engine.
 - C. Disassemble the air filter.
 - D. Remove the foam element and wash it with kerosene or soap and water.
 - E. Dry foam thoroughly.
 - F. Soak foam with lightweight oil; squeeze several times to spread oil evenly and to remove excess.
 - G. Reassemble the air filter. Make sure the foam extends over lip of bottom.
 - H. Reinstall clean air filter on engine and secure it with the two screws.

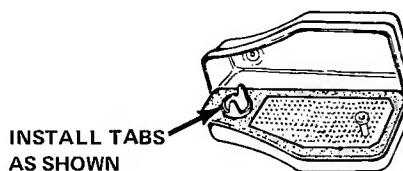
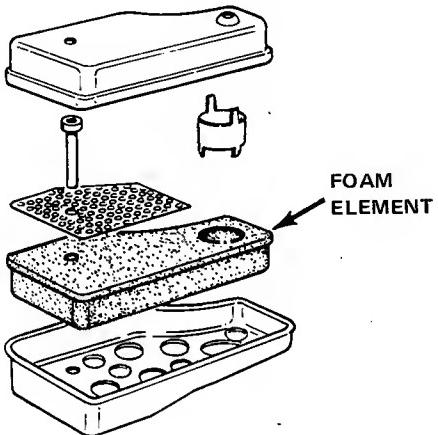
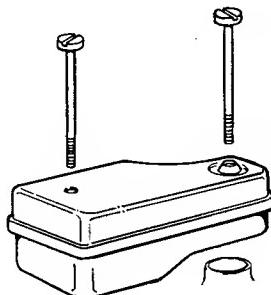
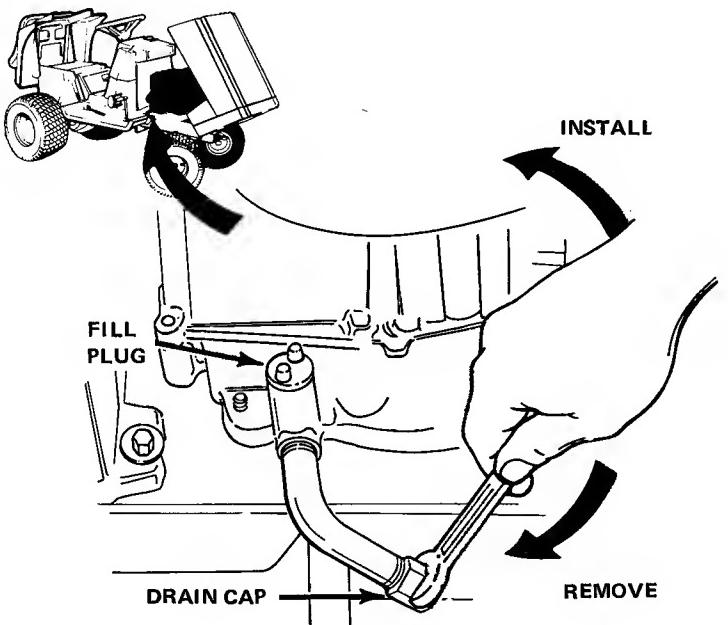


Figure 15. Clean Engine and Air Filter (25-Hour Care or as Needed)

NOTE

Change oil while engine is still warm from operation. DON'T POLLUTE; Dispose of old oil properly.

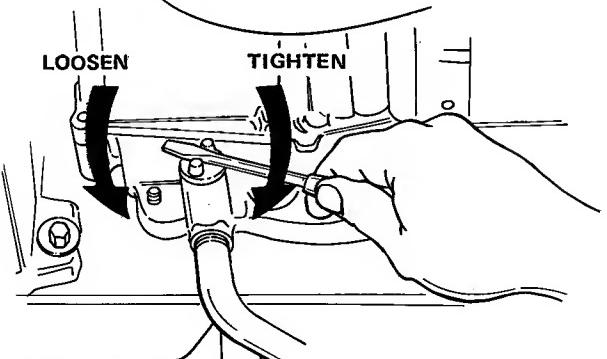
1. Remove drain cap.
2. Drain old oil.
3. Reinstall and tighten drain cap.
4. Remove fill plug.

**NOTE**

To avoid engine damage, use only high quality detergent oil of the correct grade and weight. The grade (service) marking on the can may be MS, SE, SC, or SD. The correct weight varies with the season as follows:

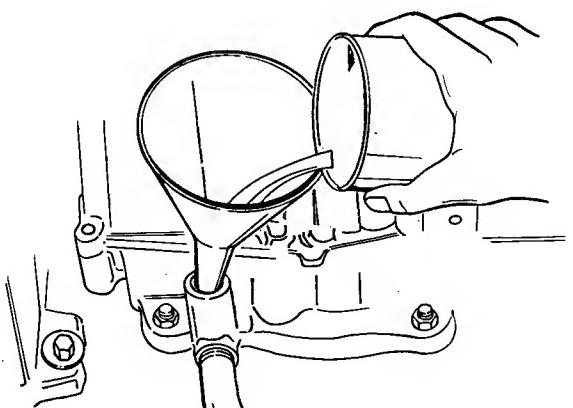
Summer

(Above 40°F: 4.5°C)
Use SAE 30,
or SAE 10W-
30.

Winter

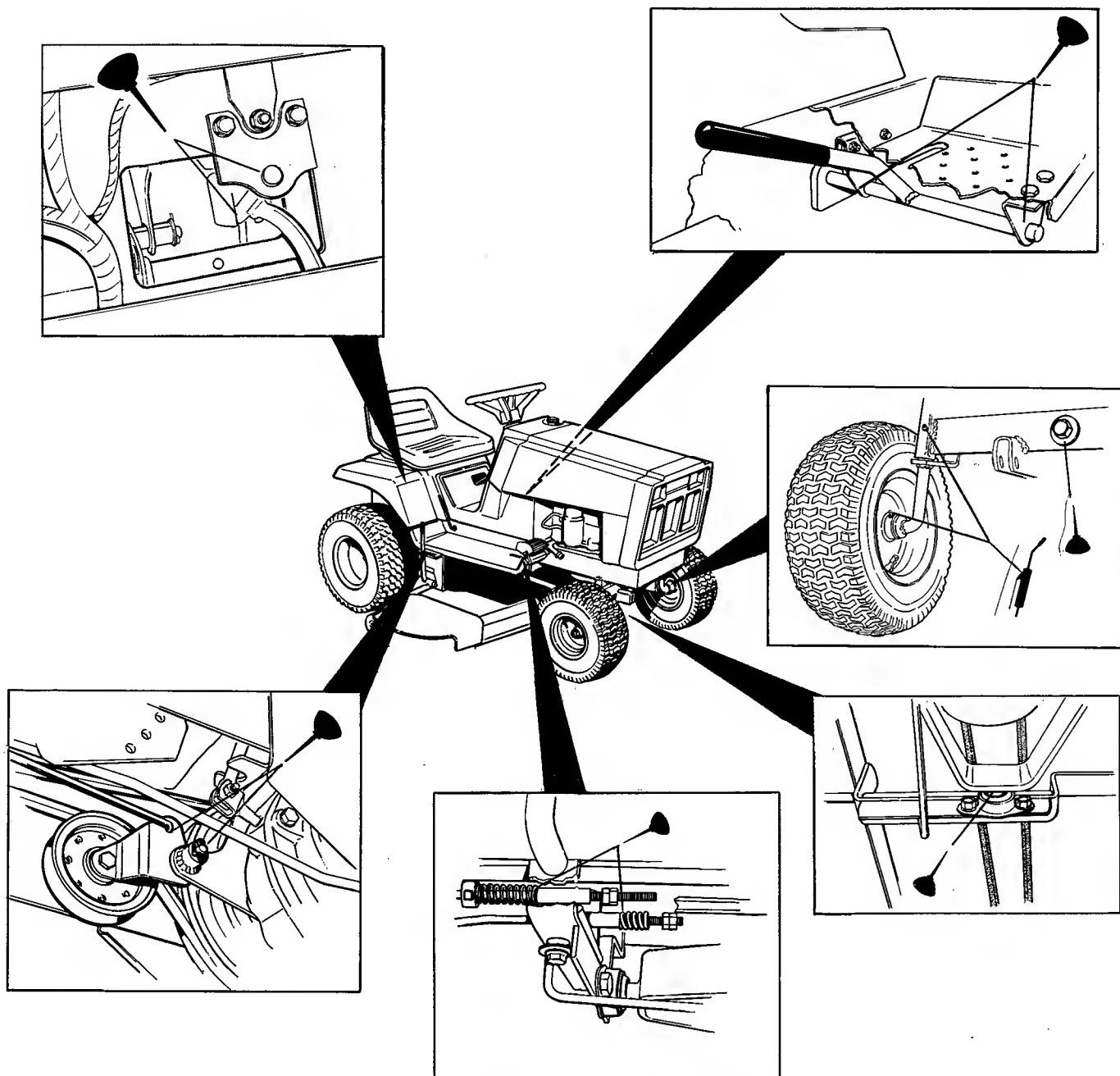
(Between 0 & 40°F : -18 & 4.5°C)
Use SAE 5W-20
or SAE 5W-30

(Below 0°F: -18°C)
Use SAE 10W or
SAE 10W-30 diluted
10% with kerosene.



5. Add new oil until pipe is full.
Pour slowly. Capacity is about 2-1/4 pints (1.1 L) in 6008 and 3 pints (1.4 L) in 6011.
6. Reinstall and tighten fill plug.

Figure 16. Change Engine Oil (25-Hour Care)



NOTE: Keep grease and oil off belts and pulleys.

Symbol	Use	Apply With	Procedure
	Lithium base automotive grease	Grease Gun	<ol style="list-style-type: none"> 1. Wipe fitting clean with rag. 2. Apply 2 or 3 shots of grease. 3. Wipe up any excess grease.
	Medium weight (SAE 30) oil	Oil Can	<ol style="list-style-type: none"> 1. Brush and wipe dirt and grass from area. 2. Apply a few drops of oil. 3. Wipe up any drips or spills.

Figure 17. Lubricate Tractor (25-Hour Care)

NOTE

Wait at least 10 minutes after operation before checking transmission oil level.

1. To check transmission oil level:
 - A. Remove transmission oil level check capscrew.
 - B. Oil should be level with bottom of hole. If not, Add SAE 90 weight oil. Remove drawbar. Remove fill plug from transmission and add oil.
 - C. When oil is level with check hole replace and tighten capscrew and fill plug.
2. Check battery fluid level.
 - A. Remove filler caps, one at a time.
 - B. Fluid must be even with split ring full mark. If not, add distilled water.
 - C. Reinstall filler caps.
3. Check air pressure of all four tires.

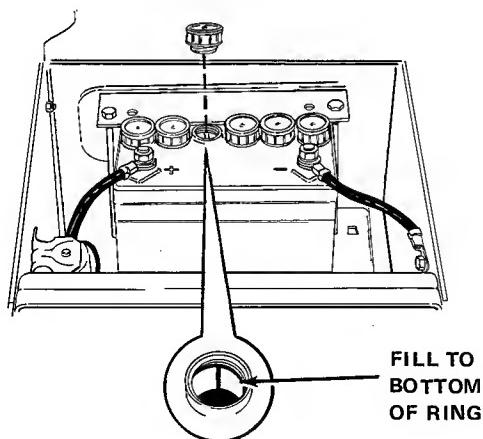
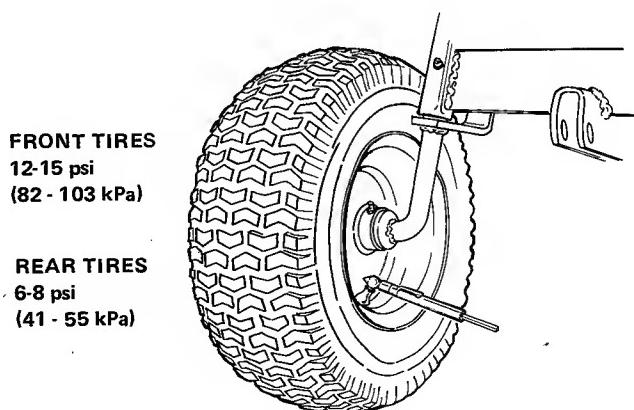
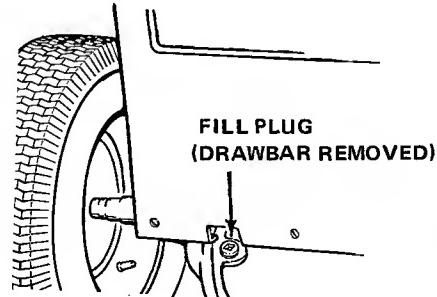
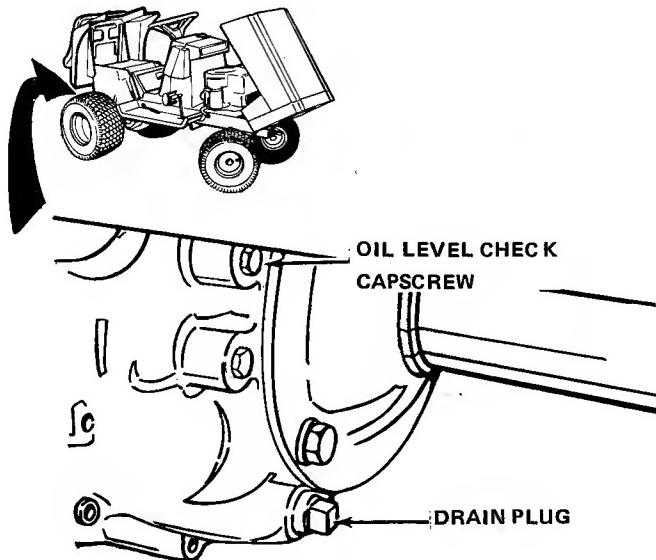
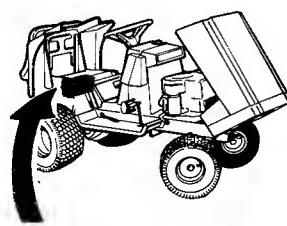
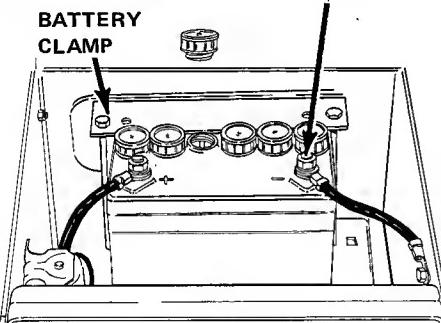


Figure 18. Check Fluid Levels and Tire Pressure (25-Hour Care)

**WARNING**

For your personal safety when removing or installing battery cables, always disconnect the negative cable **FIRST** and reconnect it **LAST**. The positive battery terminal can easily be shorted to the tractor frame by a wrench or other tool if this is not done.

**REMOVE NEGATIVE CABLE FIRST**

1. Remove cables, negative cable first.
2. Remove battery clamp.
3. Remove battery.
4. Scrub battery, cables, and battery compartment. Use baking soda and water.
5. Clean battery terminals and cable clamps with wire brush.
6. Reinstall battery and clamp.
7. Install cables, positive cable first.
8. Coat cable clamps and terminals with grease or petroleum jelly.

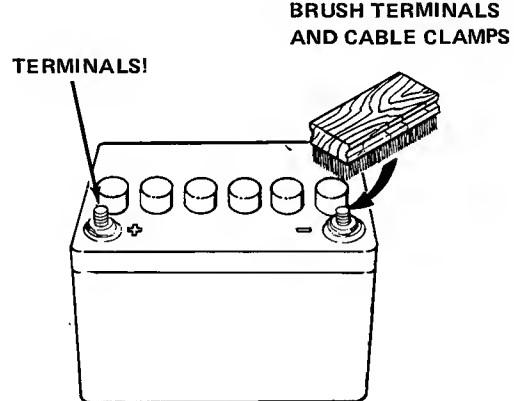
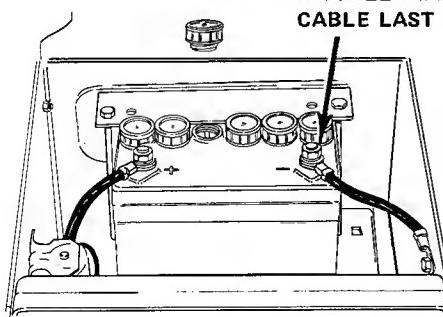
**INSTALL NEGATIVE CABLE LAST**

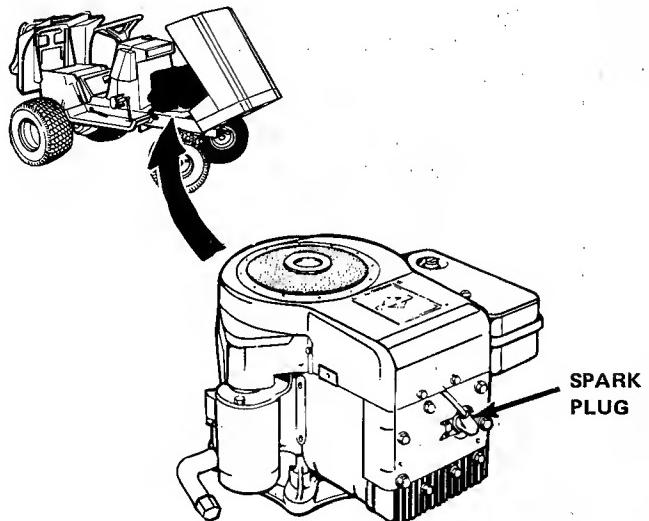
Figure 19. Clean Battery and Cables (100-Hour Care)

Clean or replace the spark plug as follows:

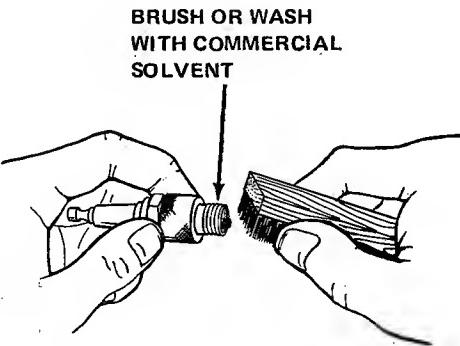
- A. Remove spark plug.

NOTE

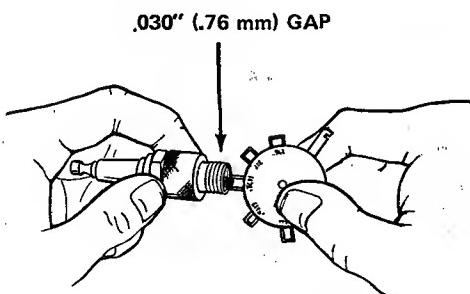
Do not clean spark plug by sandblasting. Sand or grit that remains on plug may damage engine.



- B. Clean spark plug. If plug shows signs of defects, it should be replaced with a new plug.



- C. Set the spark plug gap at .030 inch (.76 mm).



- D. Reinstall spark plug in engine and reconnect wire.

USE SPARK PLUG GAP
ADJUSTING TOOL

Figure 20. Clean or Replace Spark Plug (100-Hour Care)

MOWER SCHEDULED CARE

A schedule for routine care of the mower is provided in figure 23. Some of the scheduled requirements are based on operating hours. Total operating time for the mower can be determined in the same manner as for the tractor (see page 15). Use the maintenance record to keep track of operating hours, repairs, or servicing of the mower.

MOWER STORAGE

To protect your mower, store it in an enclosed dry area. To prepare the mower for off-season storage perform the following.

1. Remove mower from tractor. (Refer to procedure for your mower in the Installation section).
2. Clean top and underside of mower to remove all grass and dirt.
3. Coat all bare metal surfaces with a good quality paint (available from your dealer) or a light coat of oil to prevent rusting.
4. Lubricate the mower. (See figure 21 for the 36" mower, or figure 22 for the 42" mower).
5. Check, sharpen and balance the mower blades. (See figure 24).

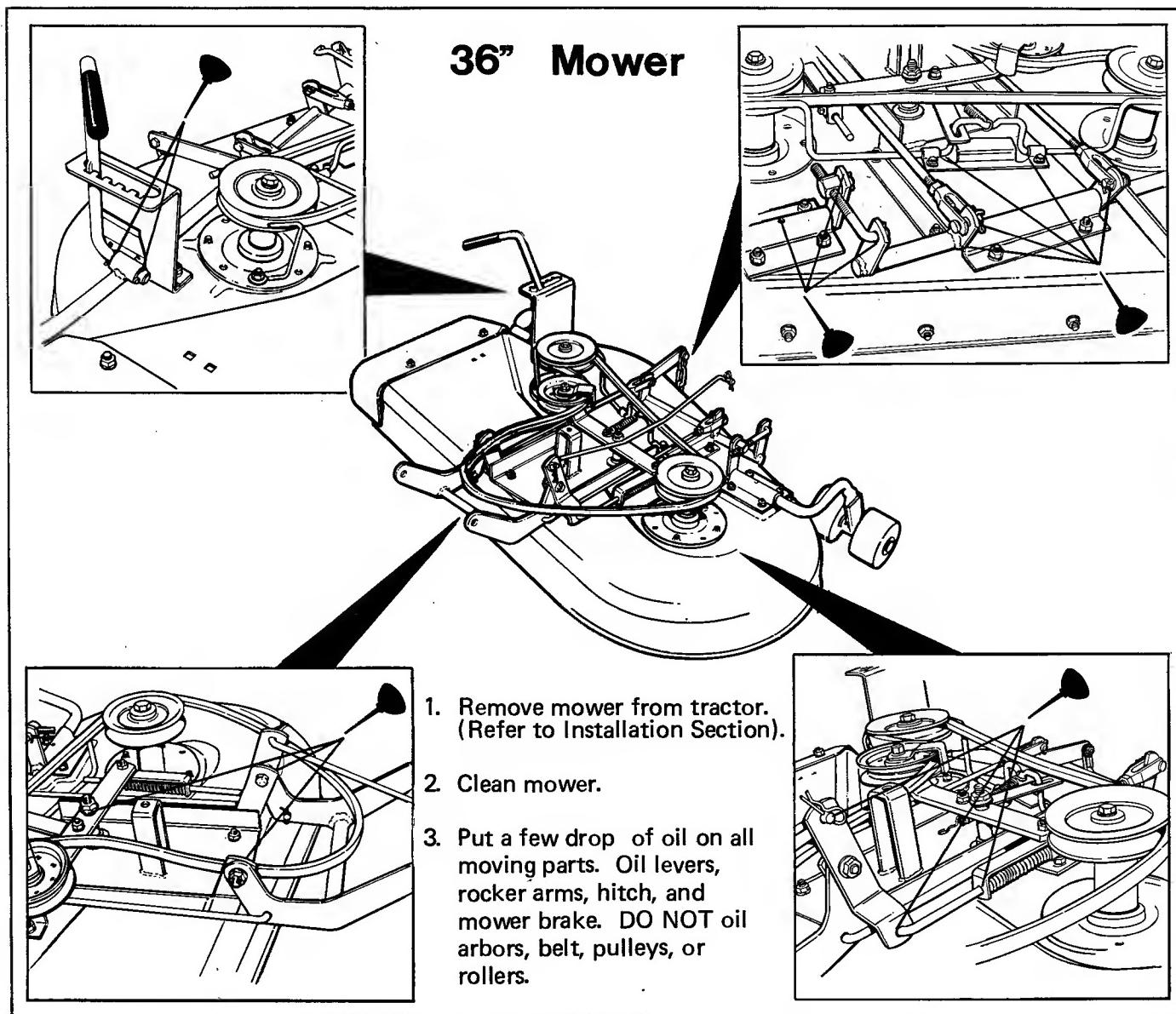
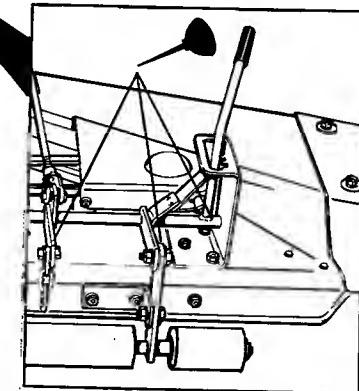
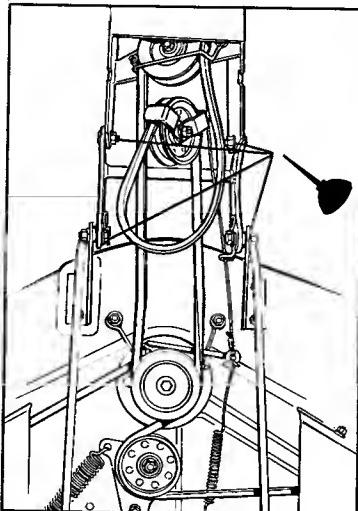
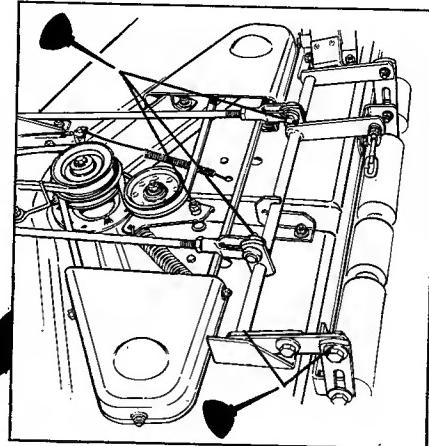
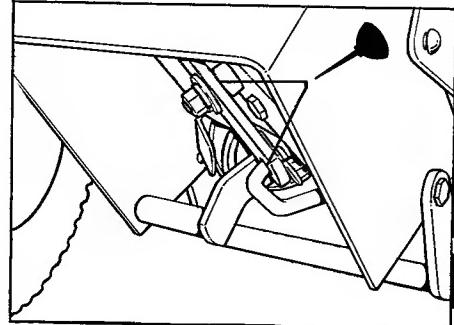


Figure 21. Lubricate Mower (25-Hour Care)

42" Mower

1. Remove mower from tractor. (Refer to Installation Section).
2. Clean Mower.
3. Put a few drops of oil on all moving parts. Oil levers, rocker arms, hitch, and mower brake. DO NOT oil arbors, belt, pulleys, or rollers.

Figure 22. Lubricate Mower (25-Hour Care)

Care Required	See Figure	Schedule			
		Before Each Use	After Each Use	Every 25 Hours*	Yearly**
Check to be sure all exterior screws, nuts, bolts, and pins are present and secure.			•		
Clean top and underside of mower to remove grass and dirt accumulations.					
Lubricate mower.	21,22		•		
Clean/sharpen blades.	24			•	
*At least once a year.					•
**More often under heavy use and immediately after striking any hard object.					

Figure 23. Summary of Scheduled Care

1. Remove mower from tractor. (Refer to procedure in Installation and Adjustment Section).
2. Check each blade. Blades should be sharp and free of nicks and dents. If not, sharpen blades as described in remaining steps.

**WARNING**

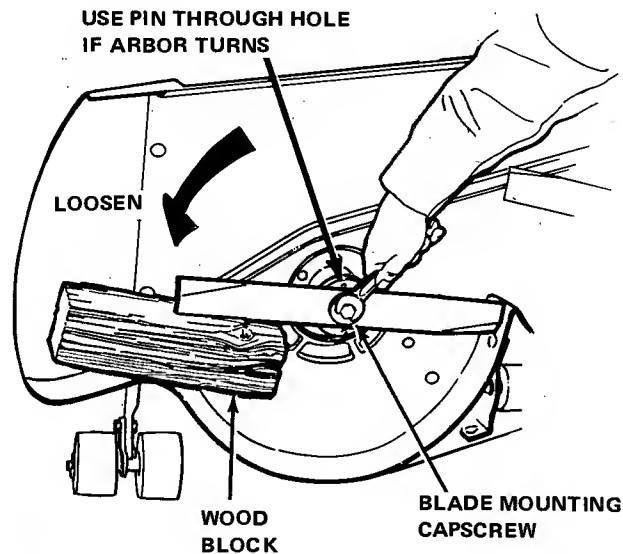
For your personal safety, do not handle the sharp mower blades with bare hands. Careless or improper handling of blades may result in serious injury.

3. To remove blade for sharpening, use wooden block to hold blade while removing its blade mounting capscrew.
4. Use a file to sharpen blade to fine edge. Remove all nicks and dents in blade edge. If blade is severely damaged, it should be replaced.
5. Check and balance blade. Use a balancing machine or the fixture shown. File material off heavier end of blade until it is balanced.

**WARNING**

For your personal safety, blade mounting capscrews must be installed with the cup washer and spline washer and then securely tightened. Torque blade mounting capscrews to 50 Ft. Lbs. (68 N·m).

6. Reinstall each blade with the tabs pointing up toward deck and secure with a capscrew, cup washer, and spline washer. Be sure all splines are aligned and washer is flush against blade. Use a wooden block to prevent blade rotation and torque capscrew to 50 Ft. Lbs. (68 N·m).



CENTER THE BLADE'S CENTER HOLE
ON NAIL. DO NOT LET BLADE TOUCH
BENCH. A BALANCED BLADE WILL
REMAIN LEVEL.

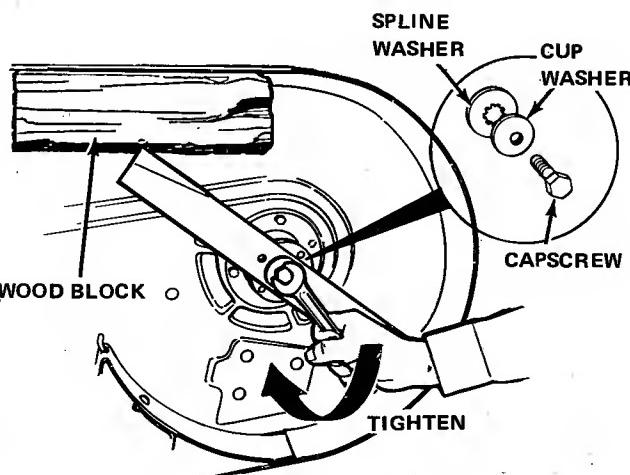


Figure 24. Check, Sharpen, and Balance Mower Blades (Yearly Care or as Needed)

Troubleshooting

CONTENT OF SECTION

This section of the manual provides troubleshooting and repair instructions for the more common and easily corrected problems. For other problems, it is recommended that you contact your dealer.



WARNING

To avoid serious injury, perform maintenance on the tractor or mower only when the engine is stopped and the parking brake engaged. Always remove the ignition key before beginning the maintenance to prevent accidental starting of the engine.

TROUBLESHOOTING PROCEDURES

Troubleshooting procedures are provided in figure 25. To use these procedures, first locate the problem description that best describes the trouble that you have encountered. Check the possible causes one at a time in the order that they are listed. For electrical problems see the wiring diagram (Figure 46). Correct any problems that you find and try to operate the tractor or mower again to see if you have eliminated the trouble.

Problem	Cause/Remedy
1. Engine will not start	A. Gear shift lever not in neutral-start position. Check safety interlock lights. Shift into neutral. B. PTO clutch lever not disengaged. Check safety interlock lights. Disengage fully. C. Out of fuel. Refill fuel tank. D. Engine flooded. Set engine control to SLOW and attempt to start. E. Circuit breaker tripped. Wait one minute for automatic reset. Replace if defective (see your dealer). F. Battery terminals require cleaning. See figure 19. G. Battery discharged or dead. Recharge or replace. H. Wiring loose or broken. Visually check wiring and replace broken or frayed wires. Tighten loose connections. I. Solenoid or starter motor faulty. Repair or replace. J. Safety interlock switch faulty. Replace if needed. (See your dealer). K. Spark plug or points faulty, fouled, or incorrectly gapped. Clean and gap or replace. L. Water in fuel. Drain fuel and refill with fresh fuel. M. Old stale gas. Drain fuel and replace with fresh fuel.
2. Engine starts hard or runs poorly.	A. Fuel mixture too rich. Move throttle control out of choke position. Clean air filter. B. Carburetor adjusted incorrectly. See your engine manual. C. Spark plug or points faulty, fouled, or incorrectly gapped. Clean and gap or replace.
3. Engine knocks.	A. Low oil level. Check/add oil as required. B. Using wrong grade of oil. See Normal Care Section (Figure 16).

Figure 25. Troubleshooting Procedures

Problem	Cause/Remedy
4. Excessive oil consumption.	A. Engine running too hot. Clean engine fins, blower screen and air cleaner. See figure 15. B. Using wrong weight of oil. See figure 16. C. Too much oil in crankcase. Drain excess oil.
5. Engine exhaust is black or smoky.	A. Dirty air filter. Clean air filter. B. Choke not fully open. Move throttle control out of choke position and be sure choke opens fully. Check carburetor adjustment.
6. Engine runs, but tractor will not drive or lacks power.	A. Transmission not in gear. Shift into gear. B. Drive belt slips. (See problem and cause below).
7. Drive belt slips.	A. Clutch free-travel or belt tension is out of adjustment. See Adjustment Section. B. Pulleys or belt greasy or oily. Clean as required. C. Belt stretched or worn. Replace with correct belt. D. Clutch rod binding in guide. Oil clutch rod.
8. Brake will not hold.	A. Brake is incorrectly adjusted. See Adjustment Section. B. Brake lining worn and requires replacement. See your dealer.
9. Tractor handles poorly.	A. Steering linkage is loose. Check and tighten any loose connections. B. Improper tire inflation. Check and correct (see figure 18). C. Wheels are spinning and slipping. Use weights to provide additional stability and traction. D. Moving too fast on slopes. Reduce speed.
10. Main (tractor) drive belt does not stop when clutch-brake is depressed.	A. Belt stops out of adjustment. See Adjustments section. B. Belt tension out of adjustment. See Adjustments section.
TROUBLESHOOTING (MOWER)	
1. Mower will not raise.	A. Lift chain not attached or broken. Attach or repair.
2. Mower cut is uneven	A. Mower not leveled properly. See leveling adjustment in mower adjustment section. B. Tractor tires not inflated equally or properly. See figure 18.
3. Mower cut is rough looking.	A. Engine speed too slow. Set for three-fourths to full speed. B. Tractor ground speed too fast. Use lower gear. C. Blades dull and require sharpening. See figure 24. D. Mower drive belt slipping. Belt oily or worn. Clean or replace belt as necessary. Readjust belt tension.

Figure 25. Troubleshooting Procedures (Cont'd)

Problem	Cause/Remedy
4. Engine stalls easily with mower engaged.	A. Tractor ground speed too fast. Use lower gear. B. Engine speed too slow. Set for three-fourths to full speed. C. Cutting height set too low when mowing tall grass. Cut tall grass at maximum cutting height during first pass. D. Discharge chute jamming with cut grass. Cut grass with discharge pointing toward previously cut area.
5. Excessive mower vibration.	A. Blade mounting screws are loose. Torque to 50 Ft. Lbs. (68 N m). B. Mower blades, arbors, or pulleys are bent. Check and replace as necessary. C. Mower blades are out of balance. Remove, sharpen, and balance blades (see figure 24).
6. Excessive belt breakage.	A. Belt tension too tight. Readjust belt tension. B. Bent or rough pulleys. Repair or replace. C. Using incorrect belt. See your dealer.
7. Mower drive belt slips or fails to drive.	A. Mower drive belt out of adjustment. See Adjustment section. B. Mower drive belt broken. Replace belt.

Figure 25. Troubleshooting Procedures (Cont'd)

Battery Replacement

A dead battery or one too weak to start the engine may not mean the battery needs to be replaced. It may, as an example, mean that the alternator is not charging the battery properly. If there is any doubt about the cause of the problem, see your dealer. If you need to replace the battery, proceed as shown in the battery cleaning procedure (figure 19).

Jump Starting With Auxiliary (Booster) Battery

Jump starting is not recommended. However, if it must be done, follow these directions. Both booster and discharged batteries should be treated carefully when using jumper cables. Follow exactly the procedure outlined below, being careful not to cause sparks.



WARNING

For your personal safety use extreme care when jump starting. Never expose battery to open flame or electric spark — battery action generates hydrogen gas which is flammable and explosive. Do not allow battery acid to contact skin, eyes, fabrics, or painted surfaces. Batteries contain a sulfuric acid solution which can cause serious personal injury or property damage.

1. Set parking brake and place transmission in "NEUTRAL". Turn off lights and other electrical loads.
2. Remove vent caps from both the booster and the discharged batteries. Lay a cloth over the open vent wells on each battery. These two actions help reduce the explosion hazard always present in either battery when connecting a "live" battery to a "dead" battery.
3. Attach one end of one jumper cable to the positive terminal of the booster battery (identified by a red color, "+" or "P" on the battery case, post or clamp) and the other end of same cable to positive terminal of discharged battery. DO NOT permit vehicles to touch each other, as this could establish a ground connection.
4. Attach one end of the remaining cable to the negative terminal (black color, "-" or "N") of the booster battery, and the other end to a bare metal surface on the frame of your tractor AWAY FROM the battery compartment (do not connect directly to negative post of dead battery). Take care that clamps from one cable do not inadvertently touch the

clamps on the other cable. Do not lean over the battery when making this connection.

5. The tractor with the discharged battery should now start.

Reverse the jump starting procedure exactly to remove the jumper cables. Then reinstall the vent caps and throw the cloths away as they may have corrosive acid on them.



WARNING

Any procedure other than the above could result in: (1) personal injury caused by electrolyte squirting out of the battery vents, (2) personal injury or property damage due to battery explosion, (3) damage to the charging system of the booster vehicle or of the immobilized vehicle.

Do not attempt to jump start a vehicle having a frozen battery because the battery may rupture or explode. If a frozen battery is suspected, examine all fill vents of the battery. If ice can be seen or if the electrolyte fluid cannot be seen, do not attempt to start with jumper cables as long as the battery remains frozen.

Drive Belt Replacement

If the tractor drive belt becomes worn or breaks, replace as follows:



WARNING

For your personal safety, stop the engine, set the parking brake, and remove the key to prevent accidental starting.

1. Remove the mower from the tractor if installed (see Installation Section).
2. With the parking brake already engaged, loosen the belt stop on the fixed idler pulley (see figure 26). Remove belt from the fixed idler pulley.
3. Remove drive belt from the engine drive pulley (loosen belt stops as necessary).
4. Slip the belt off the transmission pulley and off the tractor.
5. Install the new belt. Adjust the engine pulley belt stops according to the Adjustment Section instructions. Adjust the fixed idler pulley belt stop so it is facing straight downward on the pulley (see figure 26).
6. Place tractor on level surface and run engine with clutch engaged and transmission in neutral.

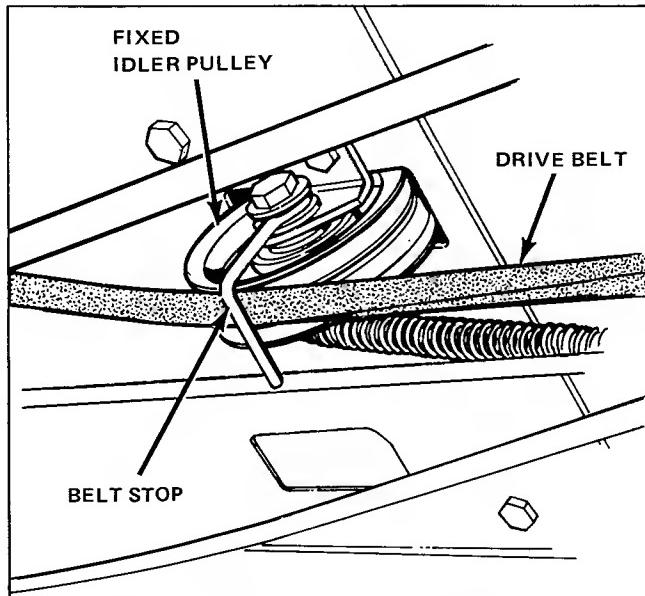


Figure 26. Drive Belt Replacement

central for 5 minutes. Then check the clutch-brake adjustment according to the Adjustment section.

7. Reinstall mower (see Installation Section).

36 Inch Mower Belt Replacement

To replace the 36 inch mower drive belt, proceed as follows:

1. Remove mower from tractor (see removal procedure in Mower Installation Section).
2. Loosen the belt guide on the idler pulley on the PTO Idler Arm (See figure 27).
3. Remove the belt from the arbor pulleys.

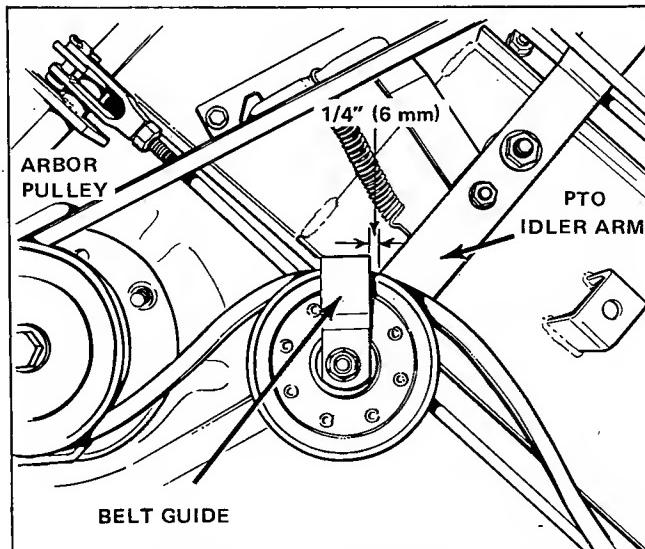


Figure 27. Mower Belt Replacement

4. Install the new belt on the arbor pulleys and idler pulley, repositioning belt guide on idler pulley. Before tightening nut on idler pulley belt guide, position the belt guide so it is 1/4 inch (6 mm) behind the idler arm when viewed from above (see figure 27). Then hold the belt guide and tighten the nut.
5. Reinstall the mower on the tractor (see Mower Installation Section) and check PTO Tension Adjustment as outlined in the Adjustment Section. Run the mower under no load conditions for about 5 minutes and recheck the PTO Tension Adjustment.

42 Inch Mower Drive Belt Replacement

To replace the main drive belt on the 42 inch mower, proceed as follows:

1. Remove mower from tractor (see removal procedure in Mower Installation Section).
2. Loosen, but do not remove the two capscrews holding the front cover onto the mower hitch (item A, figure 28). Remove front cover.
3. Remove the belt guides (items B).

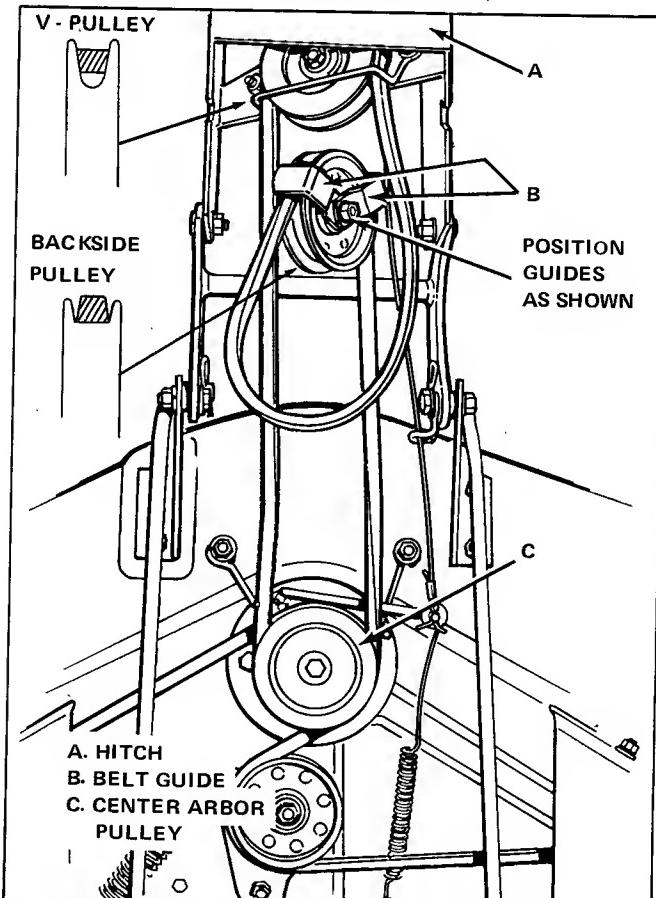


Figure 28. 42" Mower Belt Repalcement

4. Remove the old belt from center arbor pulley (item C) and the hitch pulleys. Replace with a new belt of proper size and type. Make sure the belt is properly installed and twisted as shown in figure 28.
5. Reinstall the belt guides (items B) on the idler pulley. Position belt guides as shown in figure 28 and tighten them in place.
6. Reinstall mower on tractor (see Mower Installation Section) and check PTO Tension Adjustment as outlined in the Adjustment Section. Run the mower under no load conditions for about 5 minutes and recheck the PTO Tension Adjustment.

42 Inch Mower Arbor Belt Replacement

To replace the arbor belt on the 42 inch mower, prceed as follows:

1. Remove mower from tractor (see Mower Installation Section).
2. Remove the side arbor covers (items A, figure 29) to gain access to the arbor pulleys.
3. Slip the mower drive belt (item B) off the top groove in the center arbor pulley.
4. Pull the spring held idler pulley (item C) to release tension on the arbor belt, and remove the belt from the idler pulley and arbor pulleys. Reinstall a new belt of the proper size and type.

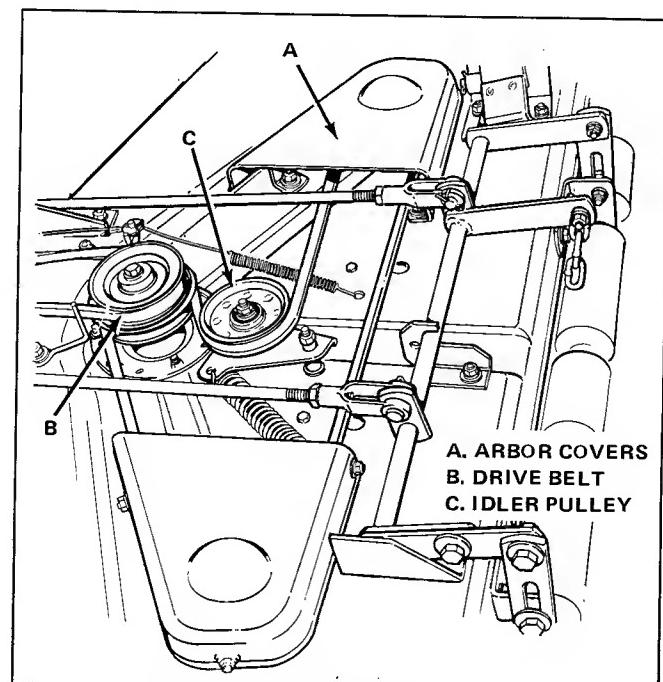


Figure 29. Arbor belt Replacement

5. Reinstall the side arbor covers and the mower drive belt in the top groove of the center arbor pulley.
6. Check the positioning of the two front belt stops. Both belt stops should be $1/8$ inch (3 mm) from the drive belt (figure 30).

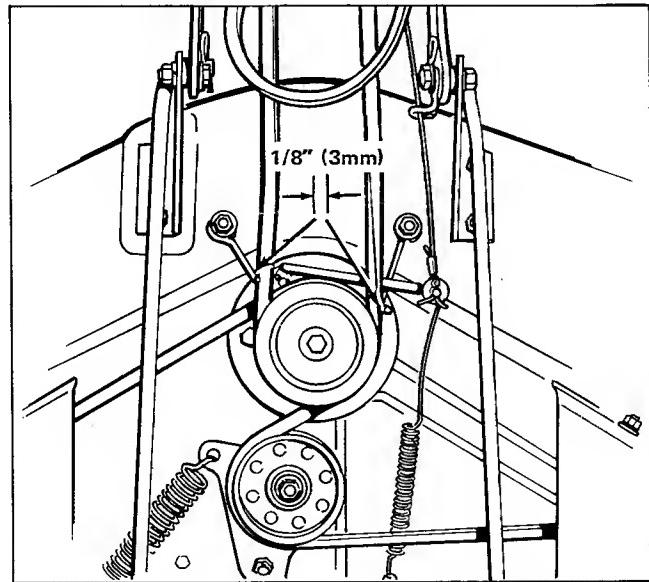


Figure 30. Arbor Belt Stop Position

Adjustments

CONTENT OF SECTION

This section contains adjustment procedures for the tractor and mower. A wiring diagram (figure 46) of the tractor is provided as an aid in locating electrical problems.



WARNING

To avoid serious injury, perform adjustment procedures on the tractor only when the engine is stopped. Always remove the ignition key before beginning the adjustment procedures to prevent accidental starting of the engine.

CLUTCH-BRAKE ADJUSTMENT

Correct adjustment of the clutch and brake mechanisms is vital to smooth machine motion and tractor braking. These adjustments also affect operation of the parking brake. The total adjustment procedure consists of three adjustments. These adjustments should be performed in the following order:

- Brake Rod Adjustment
- Clutch Rod Adjustment
- Clutch Rod Tension Adjustment

Brake Rod Adjustment

1. With the tractor on a level surface, place the transmission in gear and release the parking brake. Grasp the brake rod (item A, figure 31) and push it firmly forward to seat the brake band on the drum.

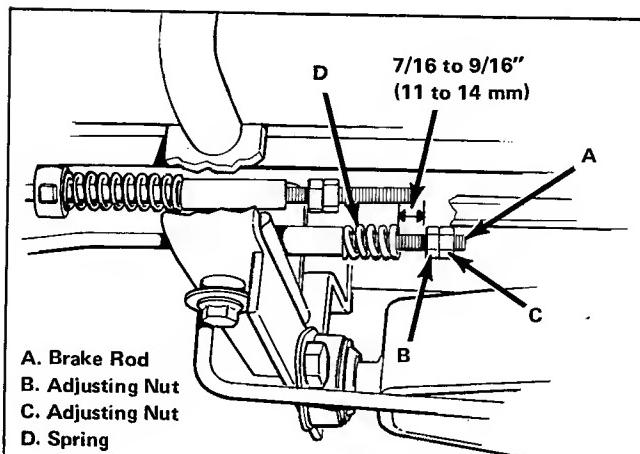


Figure 31. Brake Rod Adjustment

2. Measure the gap between the adjusting nut (item B) and the spring (item D) on the brake rod. The gap should measure between 7/16 and 9/16 inch (11 to 14 mm).
3. If the gap is not between 7/16 and 9/16 inch, loosen the nuts (items B and C) on the end of the brake rod. Turn the nuts closer to or away from the spring to achieve the correct measurement.
4. Hold adjusting nut (item B) with a wrench while tightening the other nut (item C) to it when the correct measurement is reached.

Clutch Rod Adjustment

1. Make sure that the clutch-brake pedal remains released throughout the adjustment procedure.
2. Firmly press the clutch idler pulley (item A, figure 32) against the drive belt (item B) to take all slack out of the drive belt.

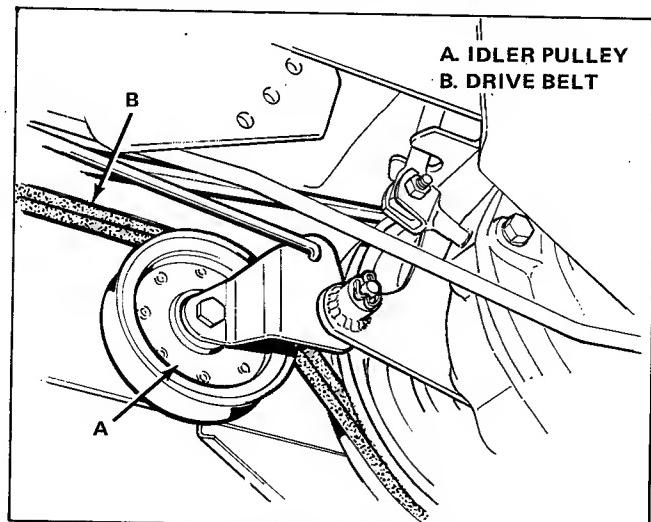


Figure 32. Clutch Rod Adjustment

3. Measure the gap between the adjusting nut (item A, figure 33) and the rodguide (item C). The gap should be between 7/16 and 9/16 inch (11 to 14 mm) with the idler pulley pressed firmly on the belt. If it is not, adjust as follows:
4. Loosen adjusting nut A from nut B. Turn adjusting nut A forward or back until the gap measurement is 7/16 to 9/16 inch. When the correct measurement is reached, hold adjusting nut A with a wrench while tightening nut B to it. Make sure adjusting nut A does not move out of adjustment.

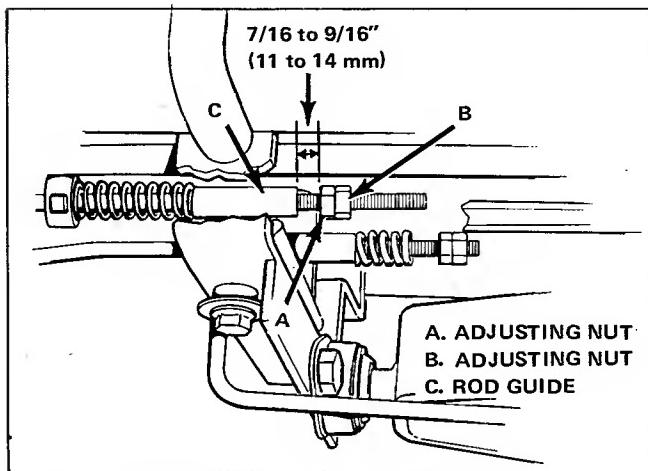


Figure 33. Clutch Rod Adjustment

Clutch Rod Tension Adjustment

1. Fully depress the clutch-brake pedal and engage the parking brake.
2. Loosen setscrew (item A, figure 34) in collar (item B). Move the collar forward or backward so that the clutch rod spring (item C) is compressed from 7/16 to 1/2 inch (11 to 13 mm).
3. With the clutch rod spring compressed 7/16 to 1/2 inch, tighten setscrew in collar.

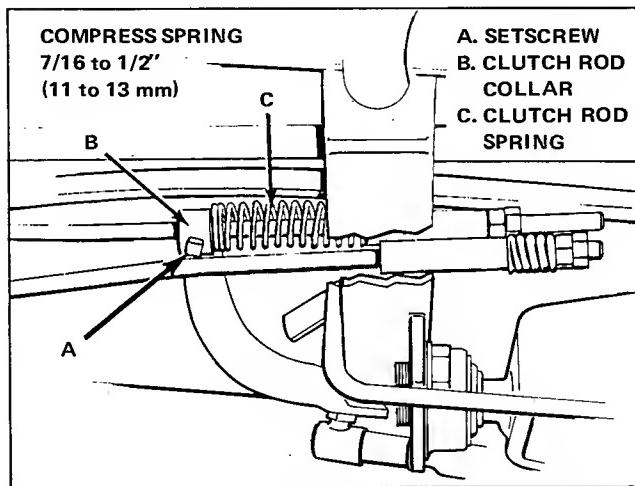


Figure 34. Clutch Rod Tension Adjustment

**WARNING**

To avoid serious injury, perform maintenance on the tractor or mower only when the engine is stopped. Always remove ignition key before beginning the maintenance to prevent accidental starting of the engine.

Main Drive Belt Stop Adjustment

If the main drive belt does not stop when the clutch-brake pedal is depressed, the belt stops may need adjustment (see figure 35). The belt stops should be adjusted so there is a 1/16 inch (1.5 mm) gap between the belt stop and the belt when the belt is tight (clutch engaged). To adjust a belt stop, loosen the capscrew that secures it and move the belt stop slightly before retightening the capscrew. Then recheck the adjustment. The capscrew should be torqued to 25 Ft. Lbs. (34 N·m).

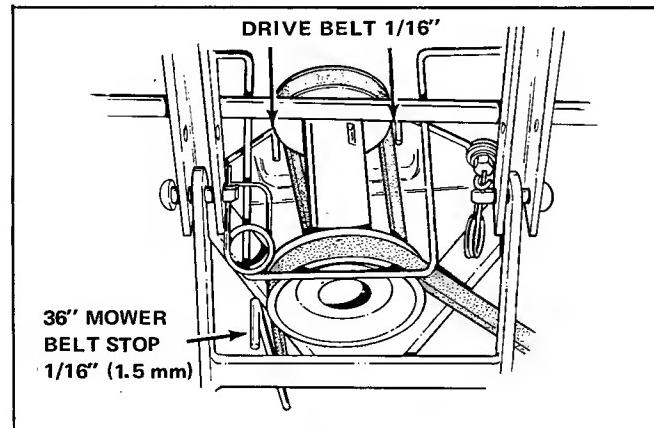


Figure 35. Drive Belt Stop Position

36 INCH MOWER ADJUSTMENTS

The following adjustments are for the 36 inch mower. Proper mower adjustment is necessary for efficient and safe mower operation.

Mower Drive Belt Tension Adjustment

If the mower slips or fails to drive, the mower belt tension may need adjustment. To check for proper adjustment, lower the mower, place the PTO lever in the engaged position. Then measure the gap between the PTO rod guide (item A, figure 36) and the set collar (item B). The gap should be 3/8 to 1/2 inch (10 to 13 mm). If it is not, perform adjustment as follows:

1. Place the PTO lever in the disengaged position.
2. Loosen the setscrew (item C) in the set collar (item B).
3. Move the set collar on the PTO rod slightly forward to increase the gap, slightly rearward to decrease the gap.
4. Retighten setscrew (item C).
5. Engage the PTO to check the gap. Repeat the adjustment as necessary until the gap measures 3/8 to 1/2 inch (10 to 13 mm).

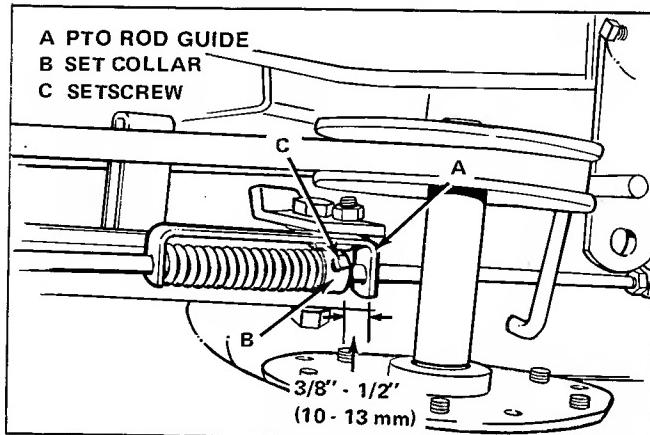


Figure 36. Mower Drive Belt Tension Adjustment

Mower Drive Belt Stop Adjustment

The belt stop holding the mower drive belt on the lower engine pulley should be adjusted for 1/16 inch (1.5 mm) clearance between the belt and belt stop when the mower clutch is engaged. See figure 35.

Right Arbor Belt Stop

The right arbor belt stop should be adjusted so that it is 1/8 inch (3 mm) from the belt with the PTO engaged (see figure 37). If it is not, loosen the nut and lockwasher and move the belt stop until the 1/8 inch clearance is reached. Then retighten the nut while holding the belt stop from moving.

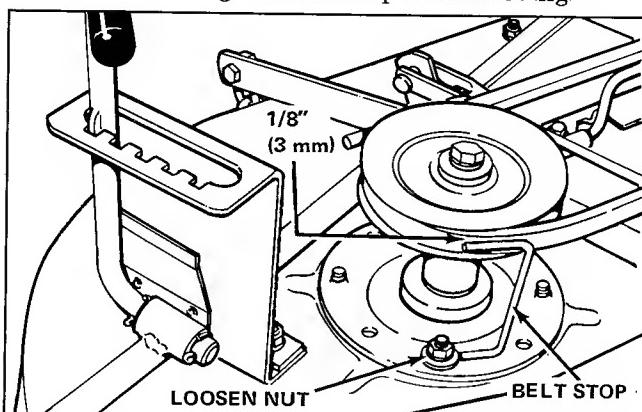


Figure 37. Right Arbor Belt Stop Position

Idler Pulley Belt Guide

The idler pulley belt guide is correctly adjusted when its edge is 1/4 inch (6 mm) from the edge of the PTO idler arm (see figure 38). If it is not, loosen the nut and lockwasher holding on the belt guide and move the belt guide to its proper position. Hold the belt guide from moving while retightening the nut.

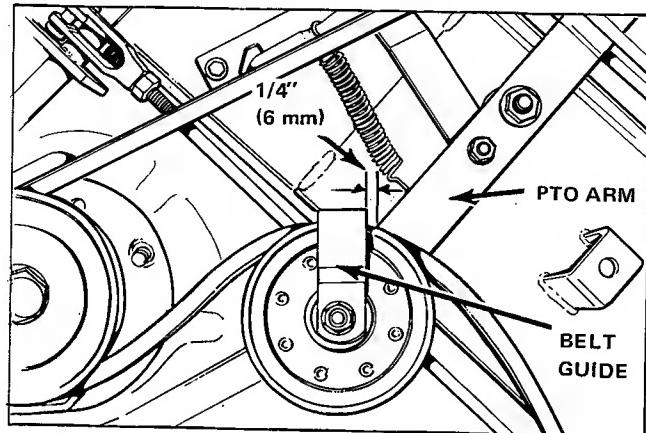


Figure 38. Idler Pulley Belt Guide Position

Leveling the 36 Inch Mower

If the 36 inch mower is giving an uneven cut, or if one side of the mower cuts at a different height than the other side, then the mower needs leveling. To level the mower, proceed as follows:

**WARNING**

For your personal safety during leveling check, remove ignition key and then remove the spark plug wire and fasten it away from the spark plug.

1. With the mower installed, place the tractor on a smooth level surface, such as a concrete floor.
2. Check for bent blades, and replace if necessary.
3. Engage the clutch. Arrange the mower blades so that they are both pointing from side-to-side, perpendicular to the tractor.
4. Measure the distance between the outside tips of each blade and the ground. If there is more than 1/8 inch (3 mm) difference between the measurements on each side, proceed to step 5. If there is 1/8 inch or less difference proceed to step 6.
5. Remove the cotter pin holding on the mower leveling rod (figure 39). Shorten the rod to raise the left side of the mower, or lengthen the rod to lower the left side of the mower. Put the leveling rod back in its hole and recheck the measurements. When both sides are the same height, replace the cotter pin in the leveling rod.

6. Disengage mower clutch to arrange the blades so they are facing front to back, parallel with the tractor. Engage mower clutch again.
7. Measure the distance to the ground from the front tip of the left blade and the rear tip of the right blade. The measurements should be equal. If they are not, proceed as follows:
8. Remove the cotter pins and pins from the hitch clevises (figure 39). Turn each clevis an equal number of turns in the same direction, shortening the hitch rods to raise the front of the mower, and lengthening the hitch rods to lower the front of the mower.
9. Replace pins through clevises and rear suspension arm and recheck measurements. When the mower is level replace and spread cotter pins, and tighten nuts against clevises.

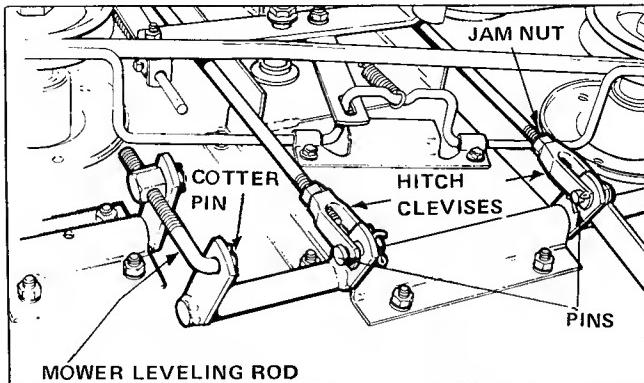


Figure 39. Leveling Mower

42 INCH MOWER ADJUSTMENTS

The following adjustments are for the 42 inch mower. Proper adjustment is necessary for safe and efficient operation.

Mower Drive Belt Tension Adjustment

If the mower slips or fails to drive, the mower belt tension may need adjustment. To check for proper adjustment, lower the mower, place the PTO lever in the engaged position. Then measure the gap between the PTO rod guide (item A, figure 40) and the set collar (item B). The gap should be 1 2 to 5 8 inch (13 to 16 mm). If it is not, perform the adjustment as follows:

1. Place the PTO lever in the disengaged position.
2. Loosen the setscrew (item C) in the set collar (item B).
3. Move the set collar on the PTO rod slightly forward to increase the gap, slightly rearward to decrease the gap.

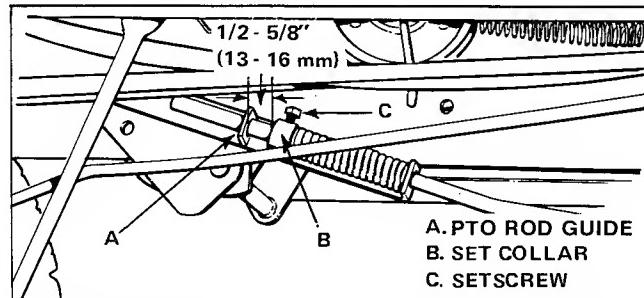


Figure 40. Mower Drive Belt Tension Adjustment

4. Tighten setscrew (item C) in vertical position.
5. Engage the PTO to check the gap. Repeat the adjustment as necessary until the gap measures 1/2 to 5/8 inch (13 to 16 mm).
6. If because of wear the drive belt has stretched to the point where the backside clutch idler contacts the front V idler (items B and A, figure 41) when the PTO is engaged, the front V idler can be moved forward.
7. Loosen the nut (item C) on V idler and move forward in slotted hole. Be sure V idler does not rub against the front hitch. Retighten nut.

Center Arbor Belt Stops

The center arbor belt stops are correctly adjusted when they are 1/8 inch (3 mm) from the belt when the PTO is engaged (see figure 41). If they are not properly adjusted, loosen the nut and lockwasher holding on the belt stop and move the belt stop to the proper position. Retighten the nut while holding the belt stop to keep it from moving out of position.

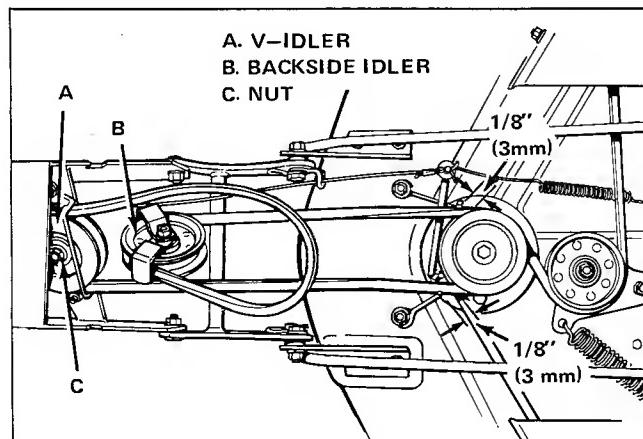


Figure 41. Belt Stop Adjustment

Mower Belt Stop Adjustment

The belt stop holding the 42 inch mower drive belt onto the lower engine pulley should be adjusted for 1/16 to 1/8 inch (1.5 to 3 mm) clearance between the pulley and the belt stop when the mower clutch is engaged. If not, loosen the belt stop screw, position the belt stop, and retighten the screw while holding the belt stop in place. (See figure 42). Also, make sure the bracket type belt stop is 1/16 to 1/8 inch from the belt when the mower clutch is engaged (see figure 42). Bend this belt stop as necessary.

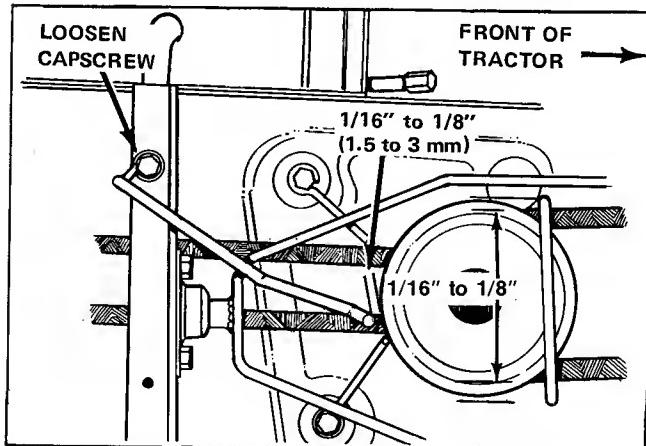


Figure 42. 42" Mower Belt Stop

Leveling 42 Inch Mower**WARNING**

For your personal safety during leveling check, remove the ignition key and then remove the spark plug wire and fasten it away from the spark plug.

For smoothest mowing results, the 42 inch mower should be adjusted so that the front tip of the center blade is 1/8 to 1/4 inch (3 to 6 mm) higher than the rear tips of the left and right blades. To check, follow these steps:

1. Place the tractor, with the mower mounted, on a smooth, level surface such as concrete. Place the mower in the highest cutting position, and place the mower lift lever in the lowered position.
2. Arrange the blades so that they are pointing forward and back, parallel with the tractor. Engage the mower clutch.
3. Measure the distance from the front tip of the center blade to the ground, and note that measurement. (See figure 43).

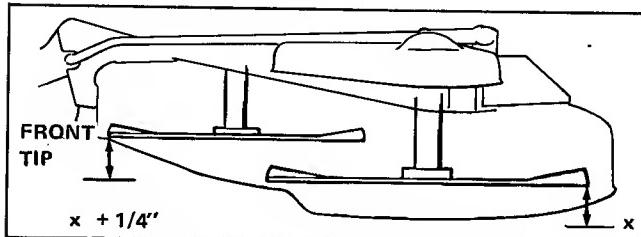


Figure 43. Leveling 42" Mower

4. Measure the distance to the ground from the rear tips of the left and right blades. Compare these measurements with the measurement from the front tip of the center blade. The front tip of the center blade should be 1/4 inch (6 mm) higher than the rear tips of the side blades (figure 43).
5. If adjustment is needed, remove the pins holding the bail assembly turnbuckles to the height adjustment arm (see figure 44). Loosen jam nuts on turnbuckles.
6. Turn both turnbuckles the same number of turns, shortening the bail arms to raise the front of the mower and lengthening the bail arms to lower the front of the mower.
7. Replace pins through turnbuckles and height adjustment arm and recheck measurements. When the proper measurement is reached, replace the cotter pins through the pins and tighten the jam nuts to the turnbuckles.

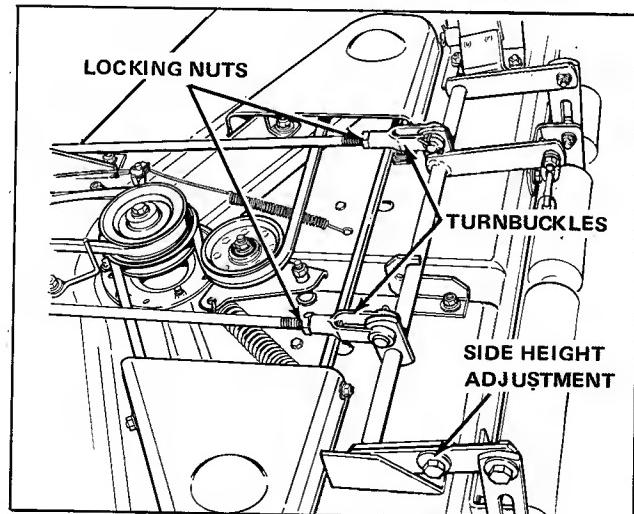


Figure 44. Leveling 42" Mower

Side-to-Side Leveling

1. To check for side-to-side levelness on the 42" mower, disengage the mower clutch and position the blades so they are pointing side-to-side. Engage the clutch again. Then measure the distance from the outside tips of the side blades to the ground when the mower is on the tractor and on a level surface.
2. If the difference between the two measurements is greater than 1/8 inch (3 mm), loosen the capscrew in the slotted hole on the left rocker arm (see figure 44).
3. Level the outside tips to within 1/8 inch and retighten the capscrew. Recheck and level again if necessary.

Seat Adjustment

The seat may be moved forward or backward to suit different size operators. To move the seat proceed as follows:

1. Raise the seat deck by lifting the latch on the left side of the seat. (See figure 45).

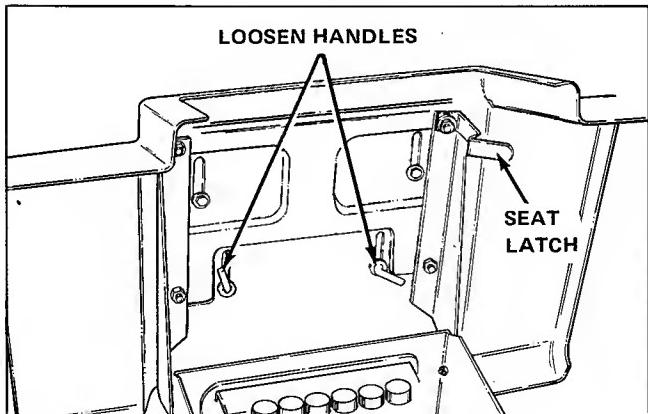


Figure 45. Seat Adjustment

2. Loosen the two handles (figure 45) holding the seat.
3. Move the seat forward or backward as desired.
4. Tighten the handles to hold the seat in place.

Raising Tractor Hood

To raise the tractor hood, pull the sides of the hood outward and raise the hood upward and forward until it rests in its raised position.



CAUTION

To prevent possible injury, take care that the hood or seat is not accidentally tipped back while working on or near the tractor.

Wiring Diagram

A wiring diagram is provided in figure 46 as an aid in troubleshooting and repair of electrical problems.

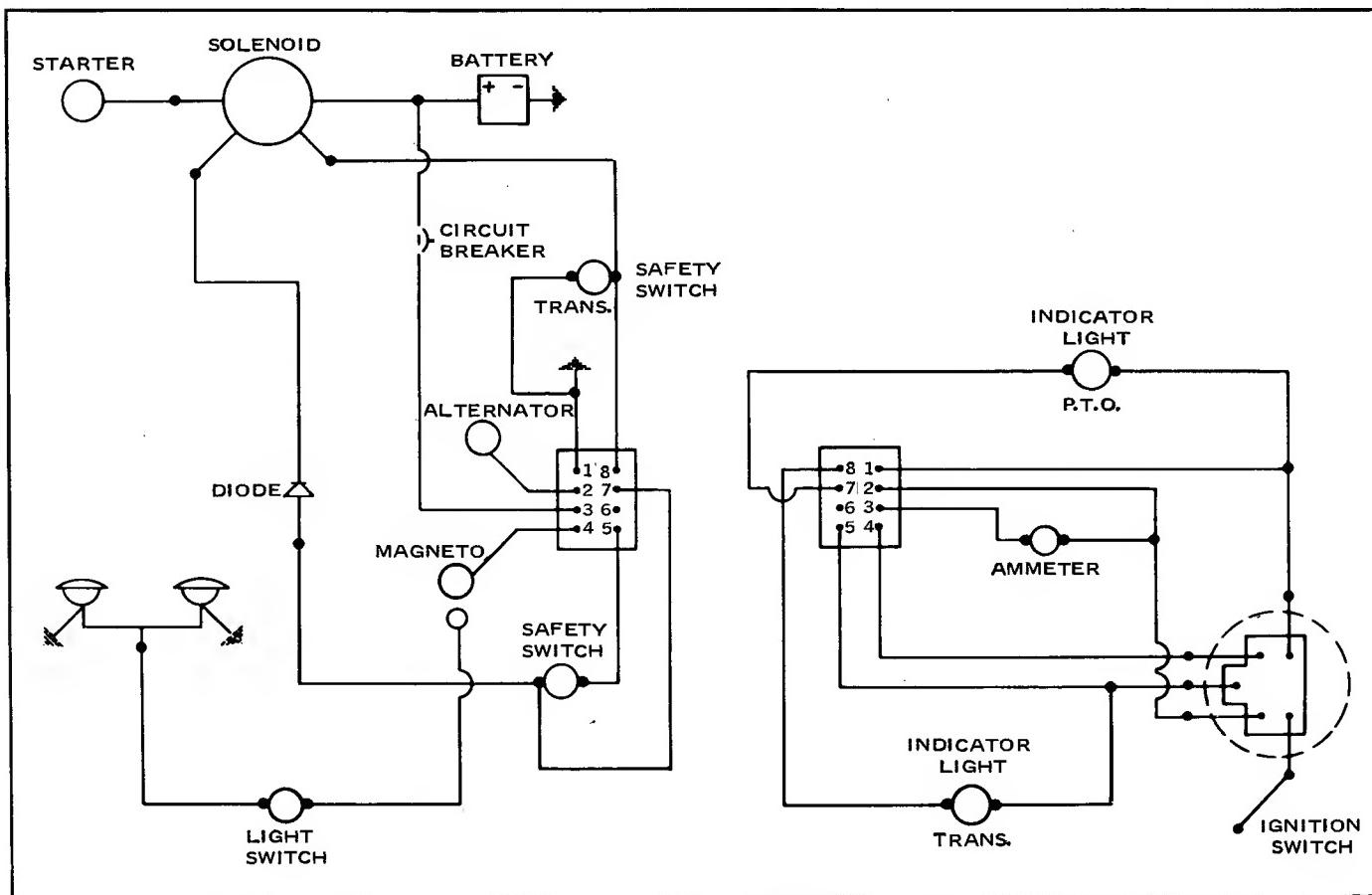


Figure 46. Electrical Schematic

Tractor and Mower Setup

UNCRATING

TO UNCRATE: Remove the top, side, and end sections of the crate and then the plastic covering from the unit. Remove: 1) the skin pack; 2) the front axle band; 3) the rear axle bands.

For 36" mowers, remove the band at the front side of the mower. Then remove the nut and lockwasher holding the "L" bracket to the mower and remove the bracket. Reinstall lockwasher and nut on the carriage bolt. Save the "L" bracket for use later as a gauge (it is 1/8 inch thick).

For 42" Mowers, remove the PTO rod nailed to the pallet. Then remove the "L" bracket holding the mower. The capscrew and nut from the "L" bracket can be discarded. Save the "L" bracket for use later as a gauge (it is 1/8 inch thick).

Slide the mower out the right side of tractor.

TRACTOR SETUP

Remove the steering wheel from the unit. Then remove the locknut and special "dome" washer from the steering shaft. Install the steering wheel. Then place the special washer "dome up" on the shaft and torque the locknut to 10 Ft. Lbs. Press the cap into the steering wheel. (The steering wheel cap and the keys are with the product literature in the tool tray under the seat).

Roll the tractor off the rear of the pallet, being careful to avoid nails and staples.



CAUTION

For your personal safety, the battery should be removed from the tractor for activation.

Remove the battery from the tractor and fill it with electrolyte to the split rings in each cell. DO NOT OVERFILL. Let the electrolyte stand for 20 minutes and recheck the level, topping up if necessary. Charge the battery until there is a specific gravity of 1.260 in each cell (maximum charge rate: 6 amps). Reinstall the battery and connect the cable, NEGATIVE CABLE FIRST.

The tires are overinflated for shipping purposes. Release air from the tires until pressures are 6 to 8 PSI in the rear tires, and 12 to 15 PSI in the front tires. Any tire below these pressures when received should be checked for leaks.

With the tractor level, remove the fill plug at the right side of the engine and fill the crankcase with oil. Use oil with a service grade of MS, SE, SC, or SD, and a weight of SAE 30 or SAE 10W-30. Add oil until the pipe is full (capacity: about 2-1/4 pints for 8 h.p. models, about 3 pints for 11 h.p. models). Reinstall fill plug.

Check the transaxle oil level. Remove the check capscrew at the rear of the transaxle (see figure 47). The oil should be level with the hole. If not, remove the tractor drawbar. Then remove the transaxle fill plug (see figure 47). Add SAE 90 weight oil until level with capscrew check hole. Reinstall both the check capscrew and the fill plug. Reinstall the drawbar.

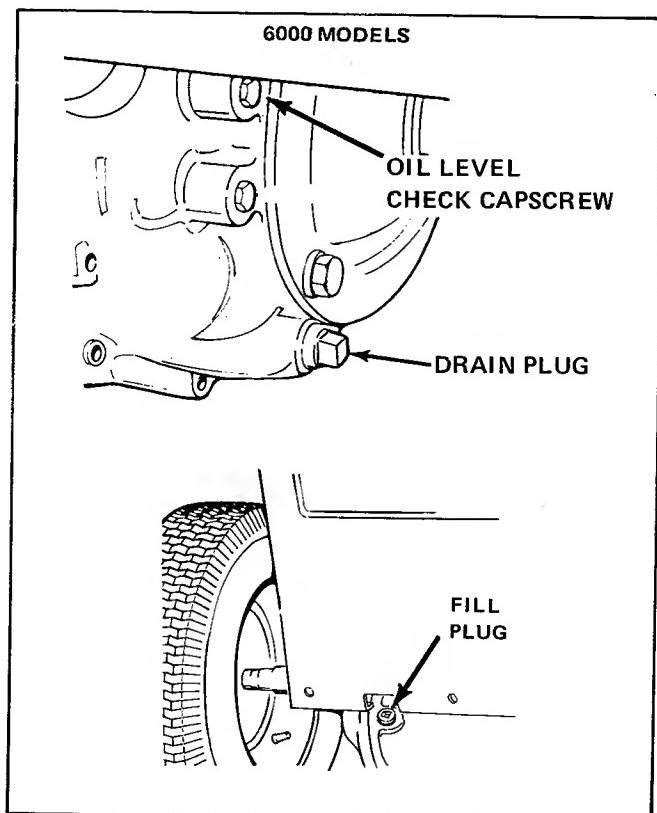


Figure 47. Check Transaxle Oil

Check tractor lubrication. As necessary apply two or three shots of grease to the fittings or a few drops of oil to pivot points. Pay special attention to wheels and to clutch-brake and steering linkages. Keep oil and grease off pulleys and belts. Wipe off any excess oil which might attract dust and dirt.

Fill the fuel tank with clean, fresh, leaded or lead-free regular grade gasoline.

Check for oil and gasoline leaks.

Start the engine and test all controls for proper operation and adjustment. Be sure to test the transaxle and PTO safety switches. The engine should not start with either the transaxle or the PTO, or both, engaged. The safety interlock lights on the dash should light momentarily when the transaxle and PTO are disengaged and the key is turned to the start position. After stopping the engine, recheck for oil and gasoline leaks.

If any control fails to operate properly during testing or seems to be out of adjustment, check and readjust it according to the Adjustments section of this manual. Once you have corrected the problem, proceed directly to the MOWER SETUP section of these instructions.

MOWER SETUP

36" Mower Setup

For shipping purposes the 36 inch mower is partially disassembled. Place the mower deck on a flat working surface and open the skin pack of parts. Sort out parts and hardware according to size and type, and then proceed as follows:

1. Install the rollers on the wheel support assemblies with $5/8 \times 1-1/4$ plain washers and the retaining rings as shown in figure 48.

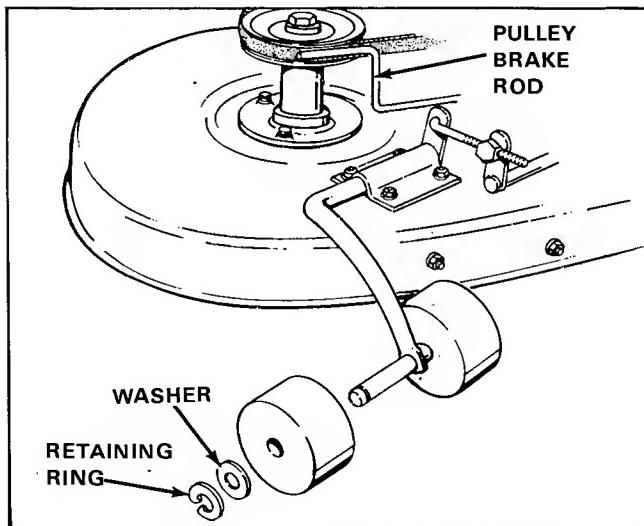


Figure 48. Installing Rollers

2. Insert the height control lever through the height control bracket, as shown in figure 49.
3. Attach the height control lever to the right rocker arm, using two of the large cotter pins provided (see figure 49). Spread the legs of the cotter pins around the lever.
4. Slide the plastic handle grip provided onto the handle of the height control lever.
5. Install lift chain on mower as shown in figure 49. Using the capscrew and flange locknut provided, secure chain on locknut side of arm so that is **tight enough not to rattle yet loose enough to pivot**.

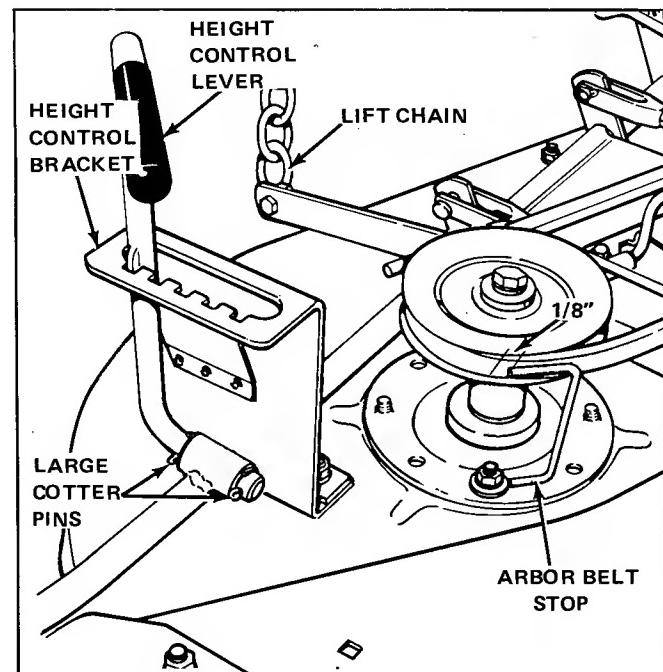


Figure 49. Attach Height Control Lever

6. Install the PTO rod on the PTO arm with a cotter pin (see figure 50).
7. Place the mower drive belt on the mower arbors and idler pulley as shown in figure 50. To place the drive belt in the idler pulley, loosen the nut holding on the idler pulley and belt guide so that the guide can be shifted to allow space to slide belt on idler pulley.

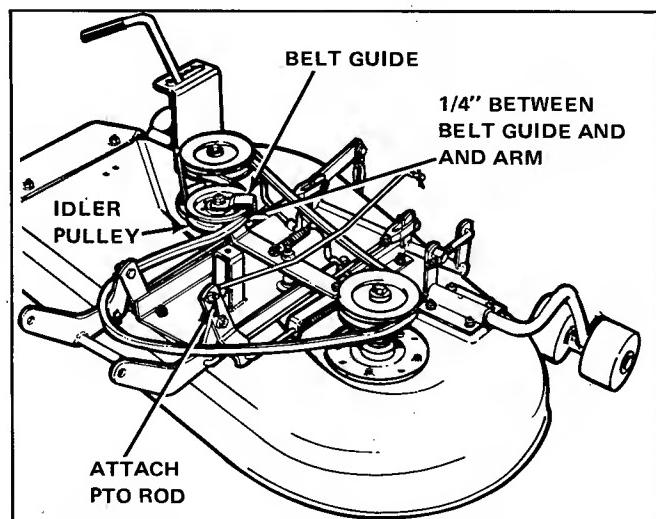


Figure 50. Installing PTO and Belt

8. After placing belt on idler pulley, position the belt guide so that it is $1/4$ inch from the PTO arm. Tighten the hex nut while holding the belt guide from turning.

9. Check to be sure the pulley brake rod (partially shown in figure 48) seats itself on the belt in both arbor pulleys. If not, loosen two screws on its holddown bracket and allow the spring to position the rod so that it bears against both pulleys. Retighten the two screws.
10. Check mower lubrication. Make sure all moving parts pivot freely. Pay special attention to rocker arm, height control lever, PTO arm, idler pulley arm, and the hitch. As necessary, add a few drops of oil to pivot points. Do not oil arbors, belt, pulleys, or rollers. Wipe off any excess oil.
11. Install the mower on the tractor. Make sure to install the mower PTO rod in the front hole (marked 36") in the tractor PTO leverl.
12. Check the mower drive belt tension adjustment and belt stop adjustment. See Adjustment section.

42" Mower Setup

For shipping purposes the 42 inch mower is partially disassembled. Place the mower deck on a flat working surface and open the skin pack of parts. Sort out parts and hardware according to size and type, and then proceed as follows:

1. To install the outside roller on the right-hand side of the mower, first connect roller bar to roller support bracket (see figure 51). Do this by inserting a shoulder bolt with 7/16 inch plain washer (items A and B) through bar and bracket from the outside of bar.

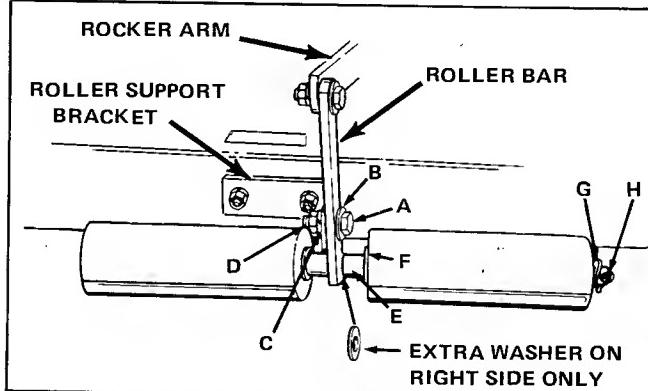


Figure 51. Assembling Rollers

2. Secure shoulder bolt with a 3/8 inch lockwasher and hex nut (items C and D) and tighten in place. Check to be sure hardware holding roller bar to rocker arm is also tight.

NOTE

The right-hand roller is installed with one washer more than the left-hand roller. This washer is located between the roller bar and the spacer.

3. On the right-hand side place a 5/8 inch plain washer, spacer (item E) and another 5/8 inch plain washer (item F) next to roller bar on rod.
4. Slide roller onto rod.
5. Place a third 5/8 inch plain washer (item G) on the rod and insert a 1 inch cotter pin (item H) through the end of rod. Spread the legs of cotter pin around the rod.
6. Repeat steps 1 through 5 to install the left-hand roller, remembering that the left side DOES NOT have the extra washer between the spacer and the roller bar.
7. When shipped, the 42 inch mower front hitch is not connected to the bail assembly rods. Pivot the front hitch forward, and insert the bail assembly rods into the holes in the sides of the front hitch. Insert the cotter pins through the rods and spread the cotter pins (see figure 52). Check to be sure belt is installed on hitch pulleys as shown in figure 52.

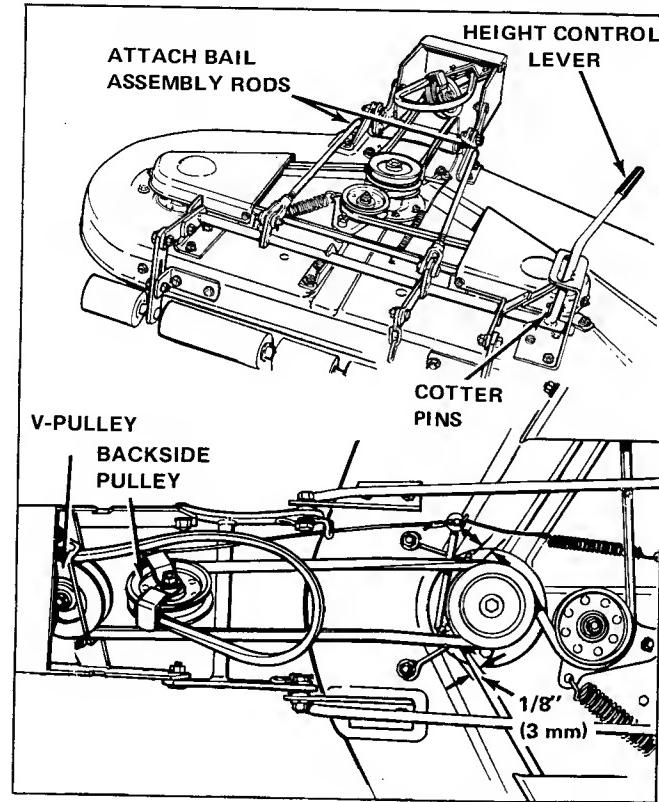


Figure 52. 42" Mower Assembly

8. Insert the height control lever through the height control lever bracket, and attach the control lever to the right rocker arm using two of the large cotter pins provided (see figures 49 and 52). Spread the legs of the cotter pins around the lever.
9. Place the grass deflector on the mower and install it using the two sets of bolts, washers, lockwashers, and nuts provided. The bolts go through the mower housing and deflector from underneath.
10. To assemble PTO rod, hold spring and set collar (items A and B, figure 53) between brackets on rod guide (item C), and slide straight end of PTO rod (item D) through rod guide, spring, and set collar. Be sure to position parts onto rod as shown. The setscrew (item E) can be threaded into set collar.

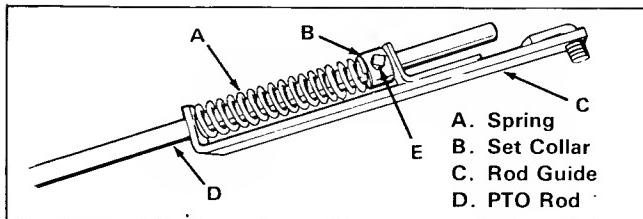


Figure 53. PTO Rod Assembly

11. Check mower lubrication. Make sure all moving parts pivot freely. Pay special attention to rocker arms, height control lever, idler pulley pivot, and the hitch. As necessary, add a few drops of oil to pivot points. Do not oil arbors, belts, pulleys, or rollers. Wipe off any excess oil.

FINAL SETUP CHECKS

Check all capscrews, nuts, pins, and spring clips on the tractor and mower to be sure they are tight and in place. Check to be sure all decals are undamaged and that there are no scratches or mars in painted surfaces. Touch up paint as needed.

Keep the product literature with the unit to help avoid losing it.

See Adjustments section to make sure all adjustments are correct.

Specifications

		6011	6008
ENGINE	MAKE: BRIGGS AND STRATTON, SYNCHRO- BALANCED	MODEL NO: 252707 HORSEPOWER: 11@3600 r.p.m. (8.2 kW) CYCLES: 4 CYLINDERS: 1 BORE: 3-7/16 Inches (87 mm) STROKES: 2-5/8 Inches (67 mm) DISPLACEMENT: 24.36 Cu.In. (399 cc) CRANKSHAFT: Vertical	MODEL NO: 191707 HORSEPOWER: 8@3600 r.p.m.(5.97 kW) CYCLES: 4 CYLINDERS: 1 BORE: 3 Inches (76 mm) STROKE: 2-3/4 Inches (70 mm) DISPLACEMENT: 19.44 Cu.In. (319cc) CRANKSHAFT: Vertical
	Electrical System	Dual Circuit Alternator, D.C. Charging Circuit, A.C. Light Circuit 6011 – 12 Volt – 39 Amp. Hr. Automotive Battery 6008 – 12 Volt – 32 Amp. Hr. Automotive Battery Key Ignition Switch Ammeter on Instrument Panel Separate Indicator Lights For Safety Interlock Switches STARTER: 12 Volt Gear Drive	
	Ignition	TYPE: Flywheel Magneto w/Key Switch Dust Proof Breaker Enclosure Under Flywheel	
	Governor	TYPE: Adjustable, Mechanical, Running in Oil RANGE: 1750 to 3400 R.P.M. (approx.)	
	Air Cleaner	Sealed Joint Housing, Oiled Foam Element ELEMENT: Reusable Polyurethane Foam	
	Crankcase	BREATHER: Ventilated through Carburetor LUBRICATION: Gear Impeller System 6011 OIL CAPACITY: 3 Pints (1.4 L) 6008 OIL CAPACITY: 2-1/4 Pints (1.1 L)	
	Fuel Tank	MATERIAL: High Density Polyurethane Fuel Level Gauge Built into Filler Cap CAPACITY: 2.2 Gallons (8.3 L)	
	Muffler	Quiet Compact, Low Back Pressure	
	Type	All Spur Gear, Running in Oil Bath	
	Material	GEARS: Heat Treated SHAFTS: Hardened and Ground BEARINGS: Needle Type Roller	
TRANSAXLE	Lubrication	SAE 90 OIL CAPACITY: 54 Ounces (1.6 L)	
	Speeds	Three Forward, One Reverse	
	Speeds @3400 r.p.m.	6011	6008
		LOW: 1.0 mph (1.6 km/h)	LOW: .9 mph (1.4 km/h)
		SECOND: 2.5 mph (4 km/h)	SECOND: 2.3 mph (3.7 km/h)
		HIGH: 3.9 mph (6.2 km/h)	HIGH: 3.6 mph (5.8 km/h)
	Differential	REVERSE: 3.9 mph (6.2 km/h)	REVERSE: 3.6 mph (5.8 km/h)
CHASSIS	Frame	All Gear, Controlled Traction Type	
		Heavy Gauge Steel Channel	
		POWER TAKE-OFF POINTS: Front and Rear	
		ENGINE MOUNTING: Above Front Axle	
	Rear Wheels	PIVOT POINT LOCATION: Front Axle 6011 TIRE SIZE: 20 x 8.00 – 10 Turf Type 6008 TIRE SIZE: 18 x 9.50 – 8 Turf Type	

CHASSIS (Cont'd)	Rear Wheels (cont'd)	PNEUMATIC INFLATION PRESSURE: 6 to 8 psi (41-55 kPa)		
	Front Wheels	TIRE SIZE: 15 x 6.00 - 6		
		PNEUMATIC INFLATION PRESSURE: 12 to 15 psi (82-103 kPa)		
	Accessibility	Hood Tips Forward, Seat Tips Rearward		
	Seat	TYPE: Bucket, High Back Adjustable to Suit Different Size Operators		
CONTROLS	Turning Radius	INSIDE REAR TIRE: 25 Inches (635 mm)		
	Steering	Full Circle Steering Wheel SYSTEM: Gear and Sector		
	Clutch-Brake Pedal	LOCATION: Right Front		
		CLUTCH: Soft Action, Touch-O-Matic V Belt		
		BRAKE: External Band Type		
		Parking Brake Lock, Foot Engaged		
	Location	MOWER LIFT LEVER: Right Side		
		POWER TAKE-OFF CLUTCH LEVER: Left Side		
		GEAR SELECTOR: Front Center of Seat		
		Ignition Key Switch	On Instrument Panel	
		Light Switch		
		Throttle Lever		
		Combined		
DIMENSIONS	Choke Lever	Combined	On Instrument Panel	
	Ammeter			
	PARKING BRAKE LOCK:	On Clutch-Brake Pedal		
	Overall Length	6011 - 64.5 Inches (1.63 m) 6008 - 63.5 Inches (1.61 m)		
	Overall Width	6011 - 33.5 Inches (851 mm) 6008 - 35.1 Inches (889 mm)		
	Height	6011 - TO TOP OF STEERING WHEEL: 42 Inches (1067 mm) 6008 - TO TOP OF STEERING WHEEL 39 Inches (991 mm) TO TOP OF ENGINE COVER: 33 Inches (838 mm)		
MOWER	Wheel Base	45.5 Inches (1.2 m)		
	Shipping Weight	6011 Tractor w/42" Mower - 590 Lbs. (268 kg)		
	With Mower(approx.)	6008 Tractor w/36" Mower - 520 Lbs. (236 kg)		
	Effective Cutting Width	6011 w/42" Mower	6008 w/36" Mower	
		42 Inches (1067 mm)	36 Inches (914 mm)	
	Overall Width with Deflector	57 Inches (1.4 m)	46 Inches (1.1 m)	
	Weight	123 Lbs. (55.8 kg)	76 Lbs. (34.5 kg)	
	Variable Cutting Hgt.	1-1/2 to 3-1/2 In. (38 to 89 mm)	1-1/2 to 3-1/2 In. (38 to 89 mm)	
	Blade Arrangement	Three staggered Blades	Two staggered blades	
	Mower Drive	V-Belt from Tractor PTO Pulley		
	Spindle Bearings	Lubricated and Sealed Ball Bearings		

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Operating with Attachments

Attachment	Engine Speed Control	Transmission Gear Selection	Approx. Ground Speed (MPH)	Required Accessories and Options	Recommended Accessories and Options
Transporting Tractor			2.5-3.5		
Rotary Mower (Smooth terrain - normal grass)			1.5-2.5		
Rotary Mower (rough terrain-heavy or wet grass)			.5 - 1		
36" Snow Thrower			.5 - 1	Lift Lever	Tire Chains 2 rear wheel weights
42" Snow Plow and Dozer Blade			.5 - 1	Lift Lever	Tire Chains 2 rear wheel weights
Vacuum Collector			.5 - 1 or 1.5-2.5	Mower Adapter, Dump Cart & Cover	Front Counterweight
Rear Grass Catcher (6008 only)			.5 - 1		Front Counterweight
30" Tiller			.5 - 1	Lift Lever	2 rear wheel weights

Figure 54. Attachment Chart

Attachment Operation on Slopes

For your personal safety, always operate your tractor with attachments up and down the face of slopes, and never across the face. Use slow tractor ground speeds on slopes, and use extreme caution when changing direction on any slope. Do not start or stop suddenly on slopes.

Two rear wheel weights are required to operate your tractor with front or mid-mounted attachments on slopes greater than 15 percent (8.5 de-

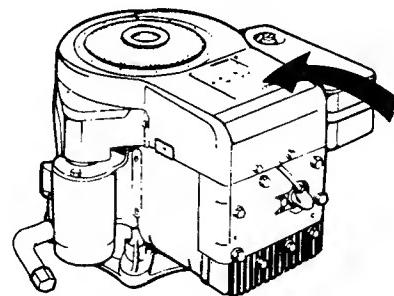
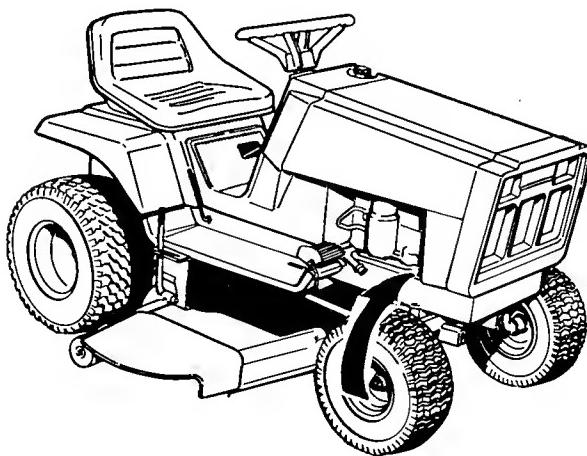
grees); use the front counterweight for rear mounted attachments on slopes greater than 15 percent (8.5 degrees). Never operate your tractor with attachments on slopes greater than 30 percent (16.7 degrees), which is a rise of 3 feet in 10 feet forward. Always operate in an up and down direction.

See your attachment Operator's Manual for more detailed information on normal operation requirements and procedures.

Simplicity

Tractor Identification

When ordering replacement parts for your tractor, be prepared to give your dealer the identification numbers found on the tractor and engine identification plates shown below. The identification plate for the tractor is located on the right frame in front of the engine. The engine ID plate is located on the top of the engine blower housing. We suggest that you locate the numbers and record them below for easy reference.



**SIMPPLICITY MANUFACTURING CO.
A DIVISION OF ALLIS-CHALMERS CORPORATION
PORT WASHINGTON, WI U.S.A.
Refer to ID no. when writing or ordering parts
ID NO.**

MODEL	TYPE	CODE

**The rotary mower identification plate
is located on the rear-center of the mower
housing.**

**Refer to ID no. when
writing or ordering parts.
ID NO.**

Attachments

Many optional accessories are available for your tractor to help it perform better or to make it easier to operate when using various attachments. See your dealer to purchase any of the following accessories.

WHEEL WEIGHTS — REAR

FRONT COUNTERWEIGHT

LIFT LEVER

TIRE CHAINS

HOUR METER

HUB CAPS

Accessories

To make your tractor more useful to you, a complete line of attachments is available. See your dealer to purchase any of the following.

DUMP CARTS (400 & 1000 L.b. Capacity)

36" ROTARY SNOW THROWER

30" TILLER

42" SNOW PLOW AND DOZER BLADE

ENGINE DRIVEN VACUUM COLLECTOR

REAR GRASS CATCHER (6008 Only)

PARTS MANUAL AVAILABLE FOR 6000 SERIES

You can order a parts manual for your tractor and for your attachments. Check the appropriate box below for the parts manual(s) you want, enclose the form with a check or money order made out to SIMPLICITY in an envelope, and send them to:

Simplicity Manufacturing Co.
500 N. Spring Street
Port Washington, WI 53074

Parts manual TP-492 contains tractors 6008 and 6011, and 36" and 42" mowers.

Parts manual TP-360 contains: 36" Snow Thrower
42" Snow Plow and Dozer Blade and Hitch
Vacuum Collector and adapters
Grass Catcher for 36" Mower
30" Tiller
Dump Cart and Cover
and all available accessories.

CUT HERE

- I would like a parts manual (TP-492) for my 6000 Series tractor and mower. I am enclosing a check or money order for **\$2.00**.
- I would like a parts manual(TP-360)for my 6000 Series attachments and accessories. I am enclosing a check or money order for **\$2.00**.
- I would like parts manuals for both the 6000 Series tractors and attachments and accessories. I am enclosing a check or money order for **\$4.00**.

NAME _____ Tractor No. _____

STREET OR RFD _____

CITY _____ STATE _____ ZIP _____

(Allow Two To Three Weeks For Delivery)

Send this form with your check or money order to:

SIMPLICITY MANUFACTURING CO.
ATTN: CUSTOMER PUBLICATIONS
500 N. SPRING STREET
PORT WASHINGTON, WI 53074



